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AD NUMBER
ADB257211
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AUTHORITY
USAMRMC ltr, 28 Feb 2003

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AD _____

Award Number: DAMD17-96-1-6310

TITLE: Identification of Abuse and Health Consequences for
Military and Civilian Women

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REPORT DATE: April 2000

TYPE OF REPORT: Final

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

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REPORT DOCUMENTATION PAGEForm Approved
OMB No. 074-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

1. AGENCY USE ONLY (Leave blank)**2. REPORT DATE**

April 2000

3. REPORT TYPE AND DATES COVERED

Final (15 Sep 96 - 14 Apr 00)

4. TITLE AND SUBTITLE

Identification of Abuse and Health Consequences for Military and Civilian Women

5. FUNDING NUMBERS

DAMD17-96-1-6310

6. AUTHOR(S)

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REPORT NUMBER****9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)**

U.S. Army Medical Research and Materiel Command

Fort Detrick, Maryland 21702-5012

**10. SPONSORING / MONITORING
AGENCY REPORT NUMBER****11. SUPPLEMENTARY NOTES**

12a. DISTRIBUTION STATEMENT: Distribution authorized to U.S. Government agencies only (proprietary information, Apr 00). Other requests for this document shall be referred to U.S. Army Medical Research and Materiel Command, 504 Scott Street, Fort Detrick, Maryland 21702-5012.

**12b. DISTRIBUTION
CODE****13. ABSTRACT (Maximum 200 Words)**

The objective of this study is to compare the prevalence rate of partner abuse in a sample of civilian women enrolled in a health maintenance organization to a sample of active duty military women. Health consequences and medical utilization will also be examined and compared between a subset of randomly selected controls (never abused) and cases (abused at least once since time since 1989).

Data collection was completed for the civilian sample (N=2005). Selected results have been analyzed and several manuscripts have been completed or are in production for the civilian sample. Reported lifetime prevalence of physical and/or sexual abuse by an intimate partner was 35.5%. Results from the analysis of domestic violence screening opinions of cases (202) and controls (240), showed that 48% of the sample agreed that health care providers should routinely screen all women, with abused women 1.5 times as likely as non-abused women to support this policy. However, 43% of women thought that screening could increase abused women's risk and 52% thought that mandatory reporting would increase a woman's risk for further abuse. Women's suggestions for interventions that health care settings should offer for abused women included counseling services, shelters, and confidential hot lines.

14. SUBJECT TERMS

Womens Health

15. NUMBER OF PAGES

101

16. PRICE CODE**17. SECURITY CLASSIFICATION
OF REPORT**

Unclassified

**18. SECURITY
CLASSIFICATION
OF THIS PAGE**

Unclassified

**19. SECURITY CLASSIFICATION
OF ABSTRACT**

Unclassified

**20. LIMITATION OF
ABSTRACT**

Unlimited

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TABLE OF CONTENTS

Report Documentation.....	1
Foreword.....	2
Introduction.....	4
Body.....	4
Key Research Accomplishments.....	8
Reportable Outcomes.....	9
Conclusions.....	10

APPENDICES

- Appendix 1. Recruitment Timeline
- Appendix 2. Abuse Screening Questions
- Appendix 3. Survey Instrument
- Appendix 4. Jones et al (publication)
- Appendix 5. Gielen et al (in review)
- Appendix 6. Abstracts of Presentations

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INTRODUCTION

The objective of this study is to estimate and compare the prevalence of intimate partner abuse and its health consequences in a population of civilian and military women. The prevalence rate of partner abuse in a sample of 2000 Kaiser Permanente women enrollees living in the Washington DC area will be compared to a sample of active duty women. Health consequences and medical utilization will also be examined and compared between a subset of 200 randomly selected controls (never abused) and 200 cases (abused at least once since time since 1989) within the civilian and military samples.

BODY

Specific Aims

The scope of work of the project is described in the following specific aims:

#1: To determine and compare the life time and annual prevalence of intimate partner abuse against women, including emotional, sexual and physical abuse, in a sample of military women and HMO enrollees and the relationship of this victimization to selected demographic factors.

#2: To determine and compare the medical care utilization patterns and costs of care for adult military and civilian women who are abused (cases) relative to the same in non-abused women (controls) over a three year period.

#3: To determine to what extent a history of intimate partner abuse is a risk factor for other medical conditions and symptoms, including: a) injuries and their medical sequelae; b) STD's/HIV; c) abnormal pap smears, PID, hysterectomies, and other gynecological problems; d) pregnancy-related problems; e) cardiovascular disease, including hypertension; f) irritable bowel syndrome and other stress related disorders; g) neurological disorders; h) problems with alcohol and other drugs; i) depression; and j) post traumatic stress disorder.

#4: To compare military and civilian women's reported medical conditions with those documented in the medical chart and examine the extent to which the correspondence between the two varies between cases and controls and between military and civilian women.

#5: To determine the percentage of military women not disclosing abuse to health care providers because of mandatory reporting regulations in military health care settings, and to compare health outcomes (including trauma) of those abused military women who disclosed abuse and those who did not.

#6: To assess and compare abused and not abused military and civilian women's preferences for, experiences with, and concerns about health care provider policies on

domestic violence screening and reporting.

#7: To provide workshops for military and civilian primary care personnel including identification and interventions for intimate partner abuse and dissemination of study results.

Study Methods

Subject Recruitment for the Civilian Population. Letters asking women to participate in a women's health survey were sent to a total of 21,426 female enrollees of a metropolitan Washington, DC area HMO in two separate interview waves held in Fall 1997 and Fall 1998. The protocol was carried out successfully with one modification made to the recruitment of study participants. Originally, one recruitment interview session was scheduled for women enrolled at Kaiser Permanente's North Capitol and Gaithersburg medical facilities. However, expansion of the study to women enrolled in 3 additional medical facilities (Largo, Kensington, and Springfield) was necessary to overcome a lower than expected response rate. The second recruitment and interview phase was performed one year later and we ended up with an overall response rate of 12% to our letters of invitation, which is typical for mail surveys.

Women were selected if they were between the ages of 21 and 55 at the time of the recruitment and, for the purpose of examining health services use among these women, enrolled continuously in the HMO from 1995 through 1997. For safety reasons, there was no reference to "abuse" in the recruitment letter. Twelve percent or 2535 women expressed interest in participating by mailing back consent forms and indicated a time(s) and telephone number(s) where it would be convenient for them to be contacted and interviewed "in private." The telephone survey team was given training about domestic violence and safety procedures prior to contacting these 2535 women who consented to be interviewed by phone.

In attempting to make telephone contact, 447 (17.6%) women could not be located and 76 (3.05%) refused to participate when phoned. In breaking down the 76 refusals, 64 (84%) prospective study participants refused prior to the onset of the interview giving no reason for refusing or stating they were too busy. The other 15% interrupted the interview while in progress and refused to complete it. Four of the twelve women who refused part way through the screening interview indicated that it was too difficult to talk about abuse. The remaining eight women did not provide a specific reason. The final sample consisted of 2005 women who were screened for abuse by phone.

Subject Recruitment for the Military Population. There was a considerable number of obstacles that caused serious delays in the recruitment of study subjects due to circumstances beyond the research team's control. Foremost, was the turnover of four military co-investigators at the NNMC. It was very difficult to locate an investigator who had the time to commit to this research effort. As a result, the civilian team of investigators was continually required to work without the direction and knowledge of a military advocate (Appendix 1, Recruitment Timeline).

Recruitment of study participants targeted active duty women enrolled in the military for a minimum of three years, covering at least 1995 through 1997; between 21 and 55 years old; and residing within a 100 miles radius of Washington, DC and Portsmouth, VA. The Defense Manpower Data Center selected 16540 active duty women across all services according to these criteria in April 1999. The center provided a data base file with the names and addresses (duty and home) and rank. Letters of introduction to the study were mailed to all 16540 women at their duty addresses in May 1999. In response to these letters, 1830 (11%) women requested a consent form by returning an address sheet to John Hopkins University. To assure that all prospective participants received an introduction letter, John Hopkins also mailed postcards in two separate waves to the remaining 14710 women. An additional 349 women requested a consent form in response to these postcards. This brought the total number of mailed consent forms to 2179. Of these consent forms mailed out, 779 (4.7%) were signed and returned to Johns Hopkins, thereby authorizing participation in the study. Slightly more than one half of these consents (455) resulted in completed interviews.

Cases and Controls.

The definition of cases and controls was the same for both the civilian and military subjects. Two dimensions of abuse (physical or sexual) screening were employed from a modified version of the ***Abuse Assessment Screen (Appendix 2, AAS)***. First, women were considered to have been physically abused if they answered yes to either of the following two questions: "Have you ever as an adult been physically abused by a husband, boyfriend, or female partner?" "Have you ever been hit, slapped, kicked, pushed, or shoved or otherwise physically hurt by a current or previous husband, boyfriend, or female partner?" Women were classified as having been sexually abused if they gave a positive response to "Have you ever, as an adult, been forced into sexual activities by a husband, boyfriend, or female partner?" Women who reported having been physically or sexually abused since 1989 and 1987 were selected as cases. Women with no reported lifetime history of abuse i.e., having answered no to all three of these questions were randomly selected as controls. Women who have been identified as a case or randomly selected as a control were asked to participate in the in-depth portion of the interview after successfully completing the screening interview. This portion of the interview took an average of 25 minutes to complete.

Progress

Data collection pertinent to all study objectives has been met for the civilian population. Survey data were collected from 2005 women (Appendix 2, Survey Instrument). Among these 2005 women, 201 cases and 240 controls were identified and interviewed with the in-depth section of the survey instrument. Medical records were abstracted and cost data was obtained for all cases and controls. An article reporting prevalence results for the initial recruitment wave of women (N=1138) was published in ***Women's Health Issues*** (Appendix 4, Jones et al, 1999, Specific Aim #1). These results were presented at the 6th International Family Violence Research Conference at the

University of New Hampshire in July, 1999.

A manuscript on women's policy preferences and opinions about domestic violence screening and mandatory reporting (202 cases and 240 controls) was invited for submission to a special issue of the *American Journal of Preventive Medicine* (Appendix 5, Gielen et al, in review Specific Aim #6). These results were presented at the Fifth World Conference on Injury Prevention and Control in New Delhi, India in March, 2000.

Other preliminary results from the civilian sample have been reported at national and international scientific meetings (Appendix 6, Abstracts).

Further analysis of the in-depth survey of cases and controls is currently underway with plans on disseminating results on the association between partner abuse and women's physical health and mental health, and the presence of substance abuse of women and their partners (Specific Aim #3). Medical visits and diagnoses were abstracted from the medical records of cases and controls for 1995 through 1997 for the purpose of comparing reported medical conditions and those reported in the charts between cases and controls (Specific Aim #4). To maintain objectivity in the abstracting process, the Kaiser Permanente medical record coders were not informed about the case / control status of the study participants. Cost data of visit encounters and hospitalizations of cases and controls were obtained for this same time period. Comparative analyses of cost and medical utilization will be performed (Specific Aim #2) between cases and controls.

To date, Dr. Campbell had conducted one workshop for primary care physicians and nurses at the Gaithersburg medical facility of Kaiser Permanente (Specific Aim #7). This workshop focused on the nature of domestic violence, how to create a climate that supports patient disclosure in a primary care setting and how to respond to disclosures.

The project is within budget. However, data collection was prolonged due to the extension of the recruitment phase of the project for both the civilian and military samples. Thus, collection and analysis of the medical records review and cost data has also been delayed, but is now fully underway. Interviews with the military sample are continuing and we expect to have these completed within the next month and data analysis soon after that.

KEY RESEARCH ACCOMPLISHMENTS

Our key research accomplishments are from analysis of the civilian sample.

Results from the screening interviews of the first recruitment and interview wave (N=1138) include the following:

- Life time prevalence of intimate partner abuse was reported to be 36.9%, with a much smaller portion – 4.0% -- reporting abuse in the past year
- 37% reported lifetime prevalence of physical and/or sexual abuse by an intimate partner
- 4% reported physical and/or sexual abuse by an intimate partner in the past year
- When controlling for other sociodemographic variables:
 - women between 21 to 29 years old and 40 to 49 years old are 70% more likely to have been abused by an intimate partner than women in other age groups ($P < .01$)
 - college educated women relative to those without a college degree are 50% less likely to be abused ($P < .001$)
 - compared to married and never married women, divorced or separated women are 2½ times more likely to have experienced abuse ($P < .001$) and widows are 4 times more likely ($P < .001$) to have experienced abuse when compared to non-widows.

Results from the analysis of health policy preferences of cases and controls are as follows:

- 48% of the sample agreed that HCPs should routinely screen all women, with abused women 1.5 times as likely as non-abused women to support this policy after adjusting for sociodemographic characteristics
- 48% preferred that the decision to report abuse to the police should be the woman's decision, with abused women being 1.4 times as likely as non-abused women to endorse this policy
- Women thought routine screening (86%) and mandatory reporting (73%) would make it easier for abused women to get help, although concerns that women would be at increased risk for abuse were also expressed for both screening (43%) and reporting (52%)
- Concerns were also raised that:

- women would be offended or embarrassed (49%) or insulted (28%) by routine screening
- abused women would be less likely to tell their HCP about the abuse under a policy of mandatory reporting (67%)

REPORTABLE OUTCOMES

Manuscripts

Jones AS, Gielen AC, Campbell JC, Schollenberger J, Dienemann JA, Kub J, O'Campo PJ, Wynne EC, Annual and Lifetime Prevalence of Partner Abuse in a Sample of Female HMO Enrollees, Women's Health Issues, 9(6):295-305, 1999.

Gielen AC, O'Campo PH, Campbell JC, Schollenberger J, Woods N, Jones AS, Dienemann JA, Kub J, Wynne C, Domestic Violence Screening and Reporting by Health Care Providers: Women's Opinions and Policy Preferences, Am J Prev Med, invited manuscript, in review.

Abstracts/Presentations

Gielen AC, O'Campo PH, Campbell JC, Schollenberger J, Woods N, Jones AS, Dienemann JA, Kub J, Wynne C, Domestic Violence Screening and Reporting: Women's Policy Preferences, Presented at the Fifth World Conference on Injury Prevention and Control, New Delhi, India, March, 2000.

Campbell JC, Gielen AC, Dienemann JA, Schollenberger J, The Introduction of Response Biases in Domestic Violence Surveys by Different System Agendas in Multiple Site Situations, Presented at the Sixth International Family Violence Research Conference, University of New Hampshire, July, 1999.

Campbell JC, Dienemann J, Wynne C, Kub J, Physical and Mental Health Consequences of Domestic Violence for Survivors, Presented at Sigma Theta Tau International 11th International Nursing Research Congress- London- June 26, 1999.

Kub J, Jones AS, Campbell J, Dienemann J, The Relationship of Alcohol and Other Drugs to Physical Abuse in a HMO sample of women, Sigma Theta Tau International 11th International Nursing Research Congress, London, June 26, 1999.

Campbell JC, Gielen AC, Wynne C, Dienemann JA, Kub J, Jones AS, O'Campo PH, Schollenberger J, The Health Status and Medical Utilization of Services for African American and White European American Domestic Violence Survivor and Control Members of the Sama HMO Plan, Presented at the Ninth International Nursing Conference, December, 1998.

Kub J, Campbell J, Diennemann J, Gielen A, O'Campo P, Jones A, Wynne C, Schollenburger, J, Strategies for a Systemwide Response to Domestic Violence by HMOs, Journal of Women's Health, February 15, 1998.

CONCLUSIONS

Conclusions that can be drawn to date reflect only the analyses completed on data from the civilian sample. The finding that this sample of well educated, middle class working women has lifetime prevalence rates similar to those of women who are not as well off demonstrates that intimate partner abuse is not limited to disadvantaged women from vulnerable population subgroups. With regard to women's policy preferences, we conclude that domestic violence screening policies and protocols need to address women's concerns about potential harms. Policy makers should reconsider the advisability of mandatory reporting. Interventions offered in managed care settings that would be well received, according to the women in this study, include counseling services, shelters and confidential hot lines.

Appendix 1: Recruitment Timeline

Recruitment Timeline

Identification of abuse and health consequences for military and civilian women DAMD 17-96-1-6310

February 1, 1996	KAISER approval of subject protocol for compliance with all applicable human use regulations.
March 26, 1996	KAISER IRB approval
April 29, 1996	Award Letter for funding from U.S. Army Medical Research and Materiel Command
October 18, 1996	NAVY approval of subject protocol for compliance with all applicable human use regulations (This process began in November 1995 in preparation for submittal of research proposal)
November 26, 1996	ARMY approval of subject protocol for compliance with all applicable human use regulations (This process began in July 1996)
November 26, 1996	Met with LTCDR Petit (our initial principal investigator) to be briefed on the family advocacy program in the military and to discuss the status of the study protocol and current issues
October 10, 1996	JOHNS HOPKINS IRB approval
December 6, 1996	ARMY IRB approval
December 10, 1996	NAVY IRB approval
February 18, 1997	BUREAU OF NAVY PERSONNEL OPNAV CONTROL SYMBOL issued
February 20, 1997	CERTIFICATE OF CONFIDENTIALITY from National Institute of Mental Health
August, 1997	Finalized computerized version of questionnaire for civilian survey (This process began in March, 1997 with the development of the operational definitions and revisions of items in the manual questionnaire)
September 3-4, 1997	Trained interviewers for civilian survey
September, 1997	Initiated civilian interviews (completed this round of interviews in Dec 1997)
September 29, 1997	Contacted NNMC principal investigator to initiate the military phase of study.
September 30, 1997	Learned that principal investigator left the NAVY.
Oct 1997 – Jan 1998	Worked on identifying a new principal investigator.
January 21, 1998	CDR Nancy Dixon volunteered to be principal investigator in Feb
Feb 5, 1998	Presented our study to FAP managers at the Office of Family Policy, Support Services in the Office of the Assistant Secretary of Defense. Invited by David Lloyd, Family Advocacy Program Manager.
Feb 6, 1998	Met with CDR Nancy Dixon to strategize the implementation of the military phase of the study.
Feb 1998	CDR Nancy Dixon sent letter to DMDC requesting names and addresses of women for our study
Mar 31, 1998	JHU team sent letter to DMDC as follow-up to CDR Dixon's letter

April 7, 1998	Rec'd reply from DMDC that we need to send more information about our study. Faxed us a guideline of questions to follow.
April 13, 1998	Identified main contact person at DMDC, Dr. Timothy Eileg, who will arrange for approval and licensing to do survey. He referred us to Jim White at Washington Headquarters Services to assist us in getting DMDC approval.
April 14, 1998	Identified contact in DMDC to retrieve distribution of active duty women, for planning the recruitment
April 14–May 12, 1998	Prepared research packet to be sent to DMDC. Worked on Privacy Act Statement waiver, recruitment area, support from points of contact.
May 12, 1998	Spoke to Mr. Eileg again and he informed us that we needed DOD sponsorship before DMDC will even review it.
May 13, 1998	Sent letter of request for sponsorship to DOD (Kim Frazier)
June 10, 1998	Sent letter again because contact moved to another office and misplaced it. Sent entire package containing research proposal this time around.
June 24, 1998	Rec'd call from DOD to notify that they will not sponsor us because of our sampling methods.
June 25, 1998	Contacted Army Medical Research, funding agency about this refusal.
June 26, 1998	Spoke to Sheila Gaines at CID at NNMC regarding DOD decision
July 2, 1998	Rec'd official letter form DOD office refusing sponsorship
July 9, 1998	E-mailed Modrow at Army Medical Research to follow-up on our request for some guidance
July 10, 1998	Rec'd call from Pat Shoop, contract specialist at Army Medical Research, informing us that she will be conferring with Modrow, Scientific Officer and Shinbur, Contract Officer
July 14, 1998	Sent in Research Proposal to Portsmouth
July 22, 1998	Scheduled for IRB review at Portsmouth
August 1998	Sent letter to DOD in response to their concerns about sponsoring our study
September 1998	Received verbal approval from DOD that will sponsor study. Awaiting official letter of approval.
September 1998	DOD sent report to DMDC to review our request for names and addresses.
December 1998	DMDC approved study with comments
January 1999	Received final approval and RCS number from WHS/DIOR
January 1999	Requested DMDC WEST for names and addresses of active duty women for recruitment into study
April 1999	Received names and addresses of active duty women from DMDC
May 1999	Mailed invitational letters to active duty women
June 1999	Began responding to requests for consent forms

July 1999	Commenced interviews
July 1999	Due to low response rate, concerned raised by investigators that we may not recruit enough cases. Raised the possibility of more funding.
Sept 1999	JHU was not informed about annual renewal and therefore, study suspended by IRB committee at NNMC, resulting in one month delay of interviewing and recruiting.
Oct 1999	Approval of annual received. Study recommenced.
Oct 1999	Explored additional funding through Tri-Care to continue research and to expand the study to spouses of active duty military personnel.
Nov 1999	Additional funding was unsuccessful.
Mar 1999	Approached DOD to explore additional funding. Exploration is ongoing.
May 1999	Expected date of completion of interviewing difficult to reach study participants. Analysis to follow.

Appendix 2: Abuse Assessment Screen

Figure 1

Partner Abuse Screening Questions

- Q. 1 Have you ever as an adult been emotionally abused by a husband, boyfriend, or female partner?
1..... Yes
2..... No
8..... Don't Know
9..... Refused
- Q.2 Have you experienced any emotional abuse in the last 12 months, that is, since September of last year?
1..... Yes
2..... No
8..... Don't Know
9..... Refused
- Q.3 Have you ever as an adult been physically abused by a husband, boyfriend, or female partner?
1..... Yes
2..... No
8..... Don't Know
9..... Refused
- Q.4 Okay, this question is worded a little different. Have you ever been hit, slapped, kicked, pushed, or shoved or otherwise physically hurt by a current or previous husband, boyfriend, or female partner?
1..... Yes
2..... No
8..... Don't Know
9..... Refused
- Q.5 Have you ever, as an adult, been forced into sexual activities by a husband, boyfriend, or female partner?
1..... Yes
2..... No
8..... Don't Know

Appendix 3: Survey Instrument

**IDENTIFICATION OF PHYSICAL ABUSE AND HEALTH CONSEQUENCES
AMONG MILITARY AND CIVILIAN WOMEN**

**QUESTIONNAIRE
MILITARY VERSION
SCREENING SECTION**

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IDENTIFICATION OF PHYSICAL ABUSE AND HEALTH CONSEQUENCES AMONG MILITARY AND CIVILIAN WOMEN

{ID: _____

Introduction/Screening Questions

{INTRO1:

Hello, may I please speak with (*name of respondent*)? This is (*name of interviewer*). I am calling from Quantech in Rosslyn, Virginia regarding a survey sponsored by DOD and conducted by Johns Hopkins University.

1..... Respondent on the phone **GO TO {INTRO2:**

2..... Respondent not available **GO TO {CODES:**

CATI TELEPHONE CALL TRACKING SYSTEM

{CODES:

Do you know when is a good time to reach her? **IF THIS PERSON INQUIRES:** I am calling on behalf of Johns Hopkins University, who is conducting a survey about health.

Reasons to call back

101 No answer

102 Busy

104 Callback

110 Answering machine **GO TO {ANSMESS**

170 New Number

Reasons to not call back

002 Refusal **GO TO {REFUSAL:**

003 Language Problem

005 Non-working Number (or cellular,
beeper, fax, modem, etc...)

009 Other reasons **GO TO {REASONS:**

010 Second Refusal **GO TO {REFUSAL:**

{REFUSAL: (BE SURE TO GIVE THEM THE TOLL-FREE NUMBERS, IF YOUR HAVE ANY REASON TO BELIEVE THE RESPONDENT IS IN DANGER: NATL DOMESTIC HOTLINE:1-800-799-7233 (SAFE) QUANTECH: 1-800-229-5220

Who refused?

1.... Respondent

2.... Someone else

{REFSIT:

What was the refusal situation?

01..... No reason given/hang-up

02..... Not enough time/too long/busy

03..... Not interested/don't do surveys

04..... Because of client

05..... Confidentiality

06..... They don't want to talk to you

07..... Very rude or irate

08..... Doesn't want to be called back

11..... Other specify: _____

{REASONS:

Other reasons.....

- 1..... Respondent seriously ill/injured
- 2..... Respondent not available/ available again on (*specified date*)
- 3..... Respondent deceased
- 4..... Don't call again
- 5..... Other

Specify: _____

{ANSMESS: MESSAGES LEFT ONLY TO RESPONDENTS WHO GAVE APPROVAL.

This is (*name of interviewer*) calling from QuanTech. We are calling (*Respondent*) regarding the survey being conducted by Johns Hopkins University. I'll call back later, or you may call us at 1-800-229-5220.

{INTRO2:

I'm a survey interviewer with QuanTech. You recently returned a form to Johns Hopkins University agreeing to be called about a survey sponsored by DOD to better understand women's health issues. I will ask you a few questions about yourself, your husband, boyfriend, or partner and your relationship with him. The questions will take about five minutes. Is now a good time for you to talk?

IF YES, GO TO {PRIVACY:

IF NO, GO TO {CODES:

{PRIVACY:

The authority for my asking you the following questions is: 10 U.S. Code Sections 136 and 2358. The principal purpose of this survey is to help military health care services respond to your need more effectively. Information traceable to you will not be maintained after the survey data is collected. Your participation in the survey is voluntary. There is no penalty if you choose not to respond.

{DATE1: Interview Date

{GENHLTH:

I would like to begin by asking you some questions for background purposes. In general, would you say your health is...

- 1..... Excellent
- 2..... Very good
- 3..... Good
- 4..... Fair
- 5..... Poor
- 8..... Don't know
- 9..... Refused

{BRTHDATE:

What is your birth date?

IF DATE IS > OR < ELIGIBLE YEARS 41-76 , GO TO CLOSING 4.

{BIRTHMON: _____

{BIRTHDAY: _____

{BIRTHYR: _____

{MARSTAT:

What is your current marital status?

- 1..... Married **GO TO {SEPARATE.**
- 2..... Divorced
- 3..... Separated
- 4..... Widowed
- 5..... Single and never married
- 9..... Refused

{COUPLE:

How many months in the past 12 months have you been romantically involved as a couple in one or more relationships? **IF MORE THAN ONE COUPLE RELATIONSHIP IN PAST 12 MONTHS, ADD MONTHS OF THE RELATIONSHIPS TOGETHER.**

FOR LESS THAN ONE MONTH ENTER FRACTION. FOR EXAMPLE, 1 WEEKS = .25, 2 WEEK = .5, 3 WEEKS = .75.

_____ **IF NONE, GO TO {ETHNIC:**

98..... Don't know

99..... Refused

{SEPARATE:

In the military, couples are often temporarily separated due to duty assignments. How many months in the last 12 months have you been separated as a couple? **FOR LESS THAN ONE MONTH ENTER FRACTION. FOR EXAMPLE, 1 WEEKS = .25, 2 WEEKS = .5, 3 WEEKS = .75.**

98..... Don't know

99..... Refused

{ETHNIC:

H:\Jschollen\documents\Military\MILITARY.doc

What is your primary ethnic background or heritage? Would you consider it to be primarily....

- 1..... African American
- 2..... White, European
- 3..... Asian or Pacific Islander
- 4..... Hispanic, Latina
- 5..... Middle Eastern or
- 6..... Native American
- 7..... Other
- 8..... Don't Know
- 9..... Refused

{ETHNOTH: _____

{LANGUAGE:

What language do you usually speak at home?

- 1..... English
- 2..... Spanish
- 3..... French
- 7..... Other
- 8..... Don't know
- 9..... Refused

{LANGOTH: _____

{MILSTAT:

Are you stationed at Portsmouth or in the DC capital area?

- 1..... Portsmouth
- 2..... DC area
- 3..... Other

{SITEOTH: _____

{MILBRNCH:

What branch of the armed forces are you in?

- 1..... Navy
- 2..... Army
- 3..... Air Force
- 4..... Marines
- 5..... Other

{OTHBRNOT: _____

{MILYRS:

For how long? _____

ENTER NUMBER OF YEARS

- 98..... Don't know
- 99..... Refused

{MILTYPE:

Could you tell me if you are enlisted or an officer?

- 1.....Enlisted **GO TO {RATE**
- 2.....Officer **GO TO {MILRANK**
- 98....Don't know
- 99....Refused

{MILRANK:

What is your rank?

Specify: _____
99..... Refused

SKIP TO {PAYGRADE:

{RATE:

What is your rate or grade?

Specify: _____

98.....Don't know

{PAYGRADE:

What is your paygrade?

98.....Don't know

99.....Refused

{EDUCATE:

What is the highest level in school you have completed?

01..... 1st - 8th grade

02..... Some high school

03..... GED (high school equivalency test)

04..... High school graduate (12 years of school)

05..... Trade school (apprenticeship)

06..... Some college

07..... 2 year college degree (associates degree)

08..... 4 year college degree (BA/BS)

09..... Postgraduate (masters or doctorate degree)

97..... Other **{EDUOTH:** _____

98..... Don't know

99..... Refused

{PCNTINC:

What percentage of your total household income in 1996 did you make?

Percentage

98..... Don't know

99..... Refused

{TOTINC:

What was your total household income in 1996 before taxes? Stop me when I get to the category that applies. Was it...

1..... Less than \$10,000

GO TO {MENTABUS:

2..... \$10,000 but less than \$20,000

GO TO { MENTABUS:

3..... \$20,000 but less than \$30,000

GO TO { MENTABUS:

4..... \$30,000 but less than \$50,000

GO TO { MENTABUS:

5..... \$50,000 but less than \$80,000

GO TO { MENTABUS:

6..... \$80,000 but less than \$100,000 or

GO TO { MENTABUS:

7..... Over \$100,000

GO TO { MENTABUS:

8..... Don't know

9..... Refused

{OTHINC:

Okay, could you just tell me if it was less or more than \$30,000?

1..... Less than \$30,000

2..... More than \$30,000

8..... Don't know

9..... Refused

One very important issue involving relationships is conflict and abuse and how it sometimes harms women's health. In particular, we are interested in learning about conflict and violence women experience from romantic relationships. Remember the information you provide is confidential.

{MENTABUS:

Have you ever as an adult been emotionally abused by a husband, boyfriend, or female partner?

1..... Yes

2..... No **GO TO {ABUSE:**

8..... Don't Know

9..... Refused

{YEARMENT:

Did you experience any emotional abuse in 1998?

1..... Yes

2..... No

8..... Don't Know

9..... Refused

{ABUSE:

Have you ever as an adult been physically abused by a husband or boyfriend?

1..... Yes **GO TO PARTNER RELATIONSHIP LOOP**

2..... No **GO TO {PARTABUS:**

8..... Don't Know **GO TO {PARTABUS:**

9..... Refused **GO TO {PARTABUS:**

{PARTABUS:

Okay, this question is worded a little different. Have you ever been hit, slapped, kicked, pushed, or shoved or otherwise physically hurt by a current or previous husband or boyfriend?

1..... Yes **GO TO PARTNER RELATIONSHIP LOOP.**

2..... No **GO TO SEXABUS:**

8..... Don't Know **GO TO SEXABUS:**

9..... Refused **GO TO SEXABUS:**

Skip pattern: When partabus = 1 and if respondent has already been established as a case (abuse = 1 and fstabg\$a <=1997 and endabg\$a >=1989), go to {sexabus. Else go to partner relationship loop.

{SEXABUS:

Have you ever, as an adult, been forced into sexual activities by a husband or boyfriend?

1..... Yes **GO TO PARTNER RELATIONSHIP LOOP.**

2..... No **GO TO {CHILDREN:**

8..... Don't Know **GO TO {CHILDREN:**

9..... Refused **GO TO {CHILDREN:**

Skip pattern: When sexabus = 1 or 3 and if respondent has already been established as a case (partabus = 1 or abuse = 1 and fstabg\$a <=1997 and endabg\$a >=1989), go to {children: Else go to partner relationship loop.

PARTNER RELATIONSHIP LOOP: ABRELNSA TO OTHRELSA. Loop is accessed when responses to abuse, partabus or sexabus questions are yes. Repeat loop separately for each question until respondent reports that there are no other abusive partners.

{ABRELN##:

What is your relationship to this person? Is he/she your....

01.....Husband (Includes separated, but not yet divorced)

02..... Ex-husband

03..... Deceased husband

04..... Current boyfriend

05..... Former boyfriend

11..... Other **ABRELNO##:** _____

08..... Don't Know

09..... Refused

When did this first happen? **ENTER ONE**

{FSTABX##: 1 9 ____ **FSTABY##:** ____ Years ago **FSTABA##:** ____ Respondent Age

When did this last happen? **ENTER ONE**

{FSTABX##: 1 9 ____ **FSTABY##:** ____ Years ago **FSTABA##:** ____ Respondent Age

{OTHAB##:

Are there any other partners this happened with?

1..... Yes **GO TO ABRELN##**

2..... No **SEE SKIP PATTERN**

8..... Don't know **SEE SKIP PATTERN**

9..... Refused **SEE SKIP PATTERN**

Skip Pattern: When all abusive partners have been identified for the abuse question, go to {partabus. When all abusive partners have been identified for the partabu question, go to {sexabus. When all abusive partners have been identified for the sexabus question, go to {children.

{CHILDREN:

How many children under 18 currently live within your household now?

_____ Number of Children

98. Don't know

99. Refused

{PREGNANT:

Are you currently expecting a child?

1. Yes

2. No

8. Don't Know

9. Refused

Please tell me how true or false the following statements are for you.

{GETSICK:

I seem to get sick a little easier than other people. Would you say this is...

1..... Mostly True

2..... Definitely True

3..... Mostly False

4..... Definitely False

8..... Don't Know

9..... Refused

{HEALTHY:

I am as healthy as anybody I know. Would you say this is...

1..... Mostly True

2..... Definitely True

3..... Mostly False

4..... Definitely False

8..... Don't Know

9..... Refused

{HLTHWRSE:

I expect my health to get worse in the next few months. Would you say this is...

1..... Mostly True

2..... Definitely True

3..... Mostly False

4..... Definitely False

8..... Don't Know

9..... Refused

CASE CRITERIA

IF FOLLOWING CONDITIONS ARE MET FOR AT LEAST ONE OF THE THREE SETS OF QUESTIONS GO TO {NAMEPART, {SAFETIME, AND CLOSING 1.

{ABUSE	Yes
{FSTABG\$A	If <= 1997
{ENDABG\$A	If >= 1989
{PARTABUS	Yes
{FSTABG\$A	If <= 1997
{ENDABG\$A	If >= 1989
{SEXABUS	Yes
{FSTABG\$A	If <= 1997
{ENDABG\$A	If >= 1989

CONTROL CRITERIA

IF FOLLOWING CONDITIONS ARE MET FOR ALL THREE QUESTIONS, GO TO {ROM_RELN.

<u>Questions</u>	<u>Responses</u>
{ABUSE	No
{PARTABUS	No
{SEXABUS	No

"NEITHER CASE NOR CONTROL CRITERIA"

All respondents who do not meet "Case" or "Control" criteria, meaning they reported partner abuse prior to 1989.

GO TO {INDXCAT3:

{ROM_RELN:

This study focuses on women and their relationships and how their relationships from 1989 - 1997 have affected their current health and well-being. Were you in a romantic relationship with your (for divorced or widowed women say: *former husband or another partner*) / (single women say: *anyone*) at anytime between the years of 1989 to 1997. **(FOR CURRENTLY MARRIED WOMEN, JUST CONFIRM HUSBAND by stating "and you were with your husband in 1997?")**

- 1..... Yes **GO TO {NAMEPART, AND RANDOM SELECTION PROCESS.**
- 2..... No **GO TO RELN 2**
- 8..... Don't know **GO RELN2.**
- 9..... Refused **GO RELN2.**

{INDXCAT: (FOR CURRENTLY MARRIED WOMEN, JUST CONFIRM HUSBAND.)

What is your relationship to the last partner you were involved with during between 1989 to 1997?

- 01.....Husband (Includes separated, but not yet divorced)
- 02..... Ex-husband
- 03..... Deceased husband
- 04..... Boyfriend
- 05..... Former boyfriend
- 11..... Other {INDXCATO: _____
- 08..... Don't Know
- 09..... Refused

GO TO {NAMEPART:

{RELN2:

Have you more recently been in a romantic relationship in 1998 and/or 1999?

- 1..... Yes **GO TO {INDXCAT2:**
- 2..... No **GO TO CLOSING2:**
- 8..... Don't know
- 9..... Refused

{INDXCAT2: (FOR CURRENTLY MARRIED WOMEN, JUST CONFIRM HUSBAND.)

What is your relationship to the last partner you were involved with since 1998?

- 01.....Husband (Includes separated, but not yet divorced)
- 02..... Ex-husband
- 03..... Deceased husband
- 04..... Boyfriend
- 05..... Former boyfriend
- 11..... Other {INDXCATO: _____
- 08..... Don't Know
- 09..... Refused

GO TO {NAMEPART:

{INDXCAT3:

What is your current relationship to partner who abused you prior to 1989?

- 01.....Husband (Includes separated, but not yet divorced)
- 02..... Ex-husband
- 03..... Deceased husband
- 04..... Boyfriend
- 05..... Former boyfriend
- 11..... Other {INDXCATO: _____
- 08..... Don't Know
- 09..... Refused

{NAMEPART:

(READ FOR CONTROLS: If you are randomly selected and choose to participate in the longer interview) I will refer to (*Index Partner*) in some of the questions. If you prefer, you can give me his first name or nickname which I can use to refer to him/her.

RANDOM SELECTION PROCESS FOR CONTROLS:

- 1..... Randomly selected **GO TO {CLOSING 1:**
2..... Not randomly selected **GO TO {CLOSING 2**

{SAFETIME: FOR CASES ONLY

Is now a safe time for you to answer questions?

- 1..... Yes **GO TO CLOSING 1**
2..... No **GO TO {INTSUS:**
8..... Don't Know **GO TO {INTSUS:**

CLOSING 1 CASES AND RANDOMLY SELECTED CONTROLS

Thank you for answering those questions. We would like to proceed with longer interview which will take about 30 minutes.

The next section of this interview will include questions about your health and well-being, your use of medical care, and your experiences and opinions about domestic violence.

If you choose not to participate in this study, there will be no change in your medical care that you receive with the military.

{DO-LONG:

- 1..... Yes **GO TO LONG INTERVIEW**
2..... Maybe, but not now
3..... No

When is a better time for you to complete the survey?

Specify: _____

TERMINATION CLAUSE

Okay, well thank you for your time. You may also call us directly by dialing 1-800-229-5220 between the hours of 9:00am to 9:00pm. For your information, I also would like to give you the phone number of the National Domestic Violence Hot Line, 1-800-799-safe(723) or 1-800-787-3224 for the hearing impaired.

CLOSING 2 RESPONDENTS WHO HAVE NOT BEEN RANDOMLY SELECTED

Thank you. Only some people will be randomly selected for a longer interview, so that is the last question which we have for you. You've been most helpful, and your time and cooperation is greatly appreciated. For your information, I also would like to give you the phone number of the National Domestic Violence Hot Line 1-800-799 -safe, or 1-800-787-3224 for the hearing impaired.

We will be selecting some people to complete a longer interview in the near future. We may be calling back to speak with you.

Is there any other information that you would like to have?

Well, (*Respondent*), I would like to thank you very much for your time and cooperation. You have been very helpful to our study. Have a nice day.

CLOSING 4 RESPONDENTS WHO DO NOT MEET BIRTH YEAR CRITERIA

Thank you. We need to speak with women between the ages of 21 to 56, and for some reason, the birth date we have on record is incorrect. So, that is the last question which we have for you now. I apologize for any inconvenience.

You've been most helpful, and your time and cooperation is greatly appreciated. For your information, I also would like to give you the phone number of the National Domestic Violence Hot Line 1-800-799 - safe, or 1-800-787-3224 for the hearing impaired.

QUESTIONNAIRE

LONG VERSION SECTION

Jacquelyn C. Campbell, Ph.D.
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School of Nursing
1830 East Monument Street
Baltimore, Md. 21205-2100

January, 1999

This section asks about the index partners of both controls and cases as identified in the screening questionnaire. In this section, we obtain the length of marriage if husband or former husband or the length of the relationship and whether respondent ever lived with him/her if boyfriend, former boyfriend, female partner, or former female partner. For former husbands, boyfriends, and female partners, we find out if they are in contact with respondents and if they are harassing them.

{LIVEHUSB: INDEX PARTNER IS HUSBAND

First I would like to ask you about (*Index Partner*). Some people who are married are separated from their husbands. Are you currently living with your husband?

- | | |
|---------------------------|------------------------|
| 1..... Living with him | GO TO {HUSBMAR: |
| 2..... Separated from him | GO TO {HUSBSEP: |
| 3..... Divorced from him | GO TO {HUSBDIV: |
| 4..... He is deceased | GO TO {HUSBWID: |
| 8..... Don't know | GO TO {HUSBMAR: |
| 9..... Refused | GO TO {HUSBMAR: |

{HUSBMAR:

When were you married? **GO TO INDEX PARTNER SECTION.**

- | | |
|------------------------|------------------------|
| {PRTFRMO: _____ | {PRTFRYR: _____ |
| 89.....Don't Know | 08 Don't Know |
| 99..... Refused | 09 Refused |

{HUSDIV:

When were you and (Index Partner) married? **GO TO {CONTACT:**

- | | |
|------------------------|------------------------|
| {PRTFRMO: _____ | {PRTFRYR: _____ |
| 89.....Don't Know | 08 Don't Know |
| 99..... Refused | 09 Refused |

When were you divorced?

- | | |
|------------------------|------------------------|
| {PRTTOMO: _____ | {PRTTOYR: _____ |
| 89.....Don't Know | 08 Don't Know |
| 99..... Refused | 09 Refused |

{HUSBWID:

When were you and (Index Partner) married? **GO TO INDEX PARTNER SECTION.**

- | | |
|------------------------|------------------------|
| {PRTFRMO: _____ | {PRTFRYR: _____ |
| 89.....Don't Know | 08 Don't Know |
| 99..... Refused | 09 Refused |

When did (Index Partner) pass away?

- | | |
|------------------------|------------------------|
| {PRTTOMO: _____ | {PRTTOYR: _____ |
| 89.....Don't Know | 08 Don't Know |
| 99..... Refused | 09 Refused |

{HUSBSEP:

When were you and (Index Partner) married?

GO TO {CONTACT:

{PRTFRMO: _____

{PRTFRYR: _____

89.....Don't Know

08 Don't Know

99..... Refused

09 Refused

When were you separated?

{PRTTOMO: _____

{PRTTOYR: _____

89.....Don't Know

08 Don't Know

99..... Refused

09 Refused

INDEX PARTNER IS BOYFRIEND OR GIRLFRIEND

Can you please tell me when you began your relationship with (*Index Partner*)?

{PRTFRMO: _____

{PRTFRYR: _____

89..... Don't know

08..... Don't know

99..... Refused

09..... Refused

{WITHMREC:

Do you still consider (Index Partner) to be your primary romantic partner?

1..... Yes / sometimes

2..... No **GO TO {EVLVMREC.**

8..... Don't Know

9..... Refused

{LIVEMREC:

Do you currently live with (Index Partner)?

1..... Yes **GO TO INDEX PARTNER SECTION.**

2..... No **SEE SKIP PATTERN.**

8..... Don't know **SEE SKIP PATTERN.**

9..... Refused **SEE SKIP PATTERN.**

{EVERMREC:

Did you ever live with(*Index Partner*)?

1..... Yes

2..... No

8..... Don't know

9..... Refused

Skip pattern:

If {withmrec= 1 (yes) or livemrec = 1 (yes) go to index partner section.

If {withmrec = 8, 9 and {livemrec = 2, 8, 9, go to {contact.

If {withmrec = 2 (no), go to mrecgri3.

{MRECGRI3:

When did your relationship with (*Index Partner*) end?

{PRTTOMO: _____ {PRTTOYR: _____

_____ 89....Don't Know 08.....Don't know

_____ 99 ...Refused 09..... Refused

{CONTACT:

Are you still in contact with (*Index Partner*)?

1..... Yes **GO TO {MRECCONT.**

2..... No

8..... Don't know

9..... Refused

{MRECCONT:

When was the last time you had contact with him/her?

{CONMRMO: _____ {CONMRYR: _____

_____ 89....Don't Know 08.....Don't know

_____ 99 ...Refused 09..... Refused

{MRECSTLK:

Ending a relationship is sometimes difficult. Is (*Index Partner*) currently stalking or harassing you?

1.....Yes

2.....No

8.....Don't Know

9.....Refused

INDEXED PARTNER SECTION

This section applies to index partners identified for controls and cases.

{PRTBRTH:

What is /was (*Index Partner's*) birth date?

{PRTMON: _____

{PRTDAY: _____

{PRTYEAR: _____

{PRTETHNC:

What *is/was* his/her primary ethnic background or heritage? Is/was it....

- 01..... African American
- 02..... White, European
- 03..... Asian, Pacific Islander
- 04..... Hispanic, Latina
- 05..... Middle Eastern (Persian, Palestinian, Arabic....)
- 06..... Native American
- 07..... Other specify _____
- 98..... Don't Know
- 99..... Refused

{PRTLNG:

What language does/did (*Index partner*) usually speak at home?

- 01..... English
- 02..... Spanish
- 03..... French
- 07..... Other {PARTLNGOT: _____
- 08..... Don't know
- 09..... Refused

{PARTEMP:

What is /was (*Index Partner's*) primary employment status?
(that you last knew about?)

- 01..... Employed full-time
- 02..... Employed part-time?
- 03..... Unemployed and looking for work?
- 04..... Unemployed and not looking for work?
- 05..... Retired ?
- 06..... Full-time student?
- 07..... Full-time student / part-time employed
- 10..... Full-time homemaker
- 12..... In military **GO TO {PRTBRNCH:**
- 11..... Other {PRTEMPOT: _____
- 08..... Don't know
- 09..... Refused

{PRTMILIT:

Is (*Index Partner*) currently an active duty member of the armed forces?

- 1..... Yes **GO TO PRTBRNCH**
- 0..... No
- 8..... Don't know
- 9..... Refused

{PRTEVMIL:

Has he/she ever been a member of the armed forces?

1.....Yes

0..... No **GO TO PRTEDUC**

8..... Don't know **GO TO PRTEDUC**

9..... Refused **GO TO PRTEDUC**

{PRTBRNCH:

What branch of the armed forces?

1..... Navy

2..... Army

3..... Air Force

4..... Marines

5..... Other

{PRTBRNOT: _____

For how long?

{PRTBRYRS: _____

{PRTBRMON: _____

98..... Don't know

99..... Refused

{PMILTYPE:

Could you tell me if (*Index Partner*) is enlisted or an officer?

1.....Enlisted **GO TO {PENLIST**

2.....Officer **GO TO {PRANK**

98.....Don't know

99.....Refused

{PRANK:

What *is/was* his rank?

Specify: _____

98..... Don't know

99..... Refused

SKIP TO {PPAYGRDE:

{PENLIST:

What *is/was* his rate or grade?

Specify: _____

98.....Don't know

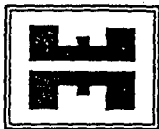
99.....Refused

{PPAYGRDE:

What *is/was* his paygrade?

98.....Don't know

99.....Refused



ALL ITEMS
PARTNER ABUSE SCALE: Physical (PASPH)

Name: _____ Today's Date: _____

This questionnaire is designed to measure the physical abuse you have experienced in your relationship with your partner. It is not a test, so there are no right or wrong answers. Answer each item as carefully and as accurately as you can by placing a number beside each one as follows:

- 1 = None of the time
- 2 = Very rarely
- 3 = A little of the time
- 4 = Some of the time
- 5 = A good part of the time
- 6 = Most of the time
- 7 = All of the time

0 NEVER
1 Rarely
2 Some of the time
3 A lot of the time
4 All of the time

1. _____ My partner physically forces me to have sex.
2. _____ My partner pushes and shoves me around violently.
3. _____ My partner hits and punches my arms and body.
4. _____ My partner threatens me with a weapon.
5. _____ My partner beats me so hard I must seek medical help.
6. _____ My partner slaps me around my face and head.
7. _____ My partner beats me when he or she drinks.
8. _____ My partner makes me afraid for my life.
9. _____ My partner physically throws me around the room.
10. _____ My partner hits and punches my face and head.
11. _____ My partner beats me in the face so badly that I am ashamed to be seen in public.
12. _____ My partner acts like he or she would like to kill me.
13. _____ My partner threatens to cut or stab me with a knife or other sharp object.
14. _____ My partner tries to choke or strangle me.
15. _____ My partner knocks me down and then kicks or stomps me.
16. _____ My partner twists my fingers, arms or legs.
17. _____ My partner throws dangerous objects at me.
18. _____ My partner bites or scratches me so badly that I bleed or have bruises.
19. _____ My partner violently pinches or twists my skin.
20. _____ My partner badly hurts me while we are having sex.
21. _____ My partner injures my breasts or genitals.
22. _____ My partner tries to suffocate me with pillows, towels, or other objects.
23. _____ My partner pokes or jabs me with pointed objects.
24. _____ My partner has broken one or more my bones.
25. _____ My partner kicks my face and head.



PARTNER ABUSE SCALE: Non-physical (PASNP)

Name: _____ Today's Date: _____

This questionnaire is designed to measure the non-physical abuse you have experienced in your relationship with your partner. It is not a test, so there are no right or wrong answers. Answer each item as carefully and as accurately as you can by placing a number beside each one as follows:

- 1 = Never
- 2 = Very rarely
- 3 = A little of the time
- 4 = Some of the time
- 5 = A good part of the time
- 6 = Very frequently
- 7 = All of the time

- 0 Never
- 1 Rarely
- 2 Some of the time
- 3 A lot of the time
- 4 All of the time

1. My partner belittles me. _____
2. My partner demands obedience to his or her whims. _____
3. My partner becomes surly or angry if I say he or she is drinking too much. _____
4. My partner demands that I perform sex acts that I do not enjoy or like. _____
5. My partner becomes very upset if my work is not done when he or she thinks it should be. _____
6. My partner does not want me to have any male friends. _____
7. My partner tells me I am ugly and unattractive. _____
8. My partner tells me I really couldn't manage or take care of myself without him or her. _____
9. My partner acts like I am his or her personal servant. _____
10. My partner insults or shames me in front of others. _____
11. My partner becomes very angry if I disagree with his or her point of view. _____
12. My partner is stingy in giving me money. _____
13. My partner belittles me intellectually. _____
14. My partner demands that I stay home. _____
15. My partner feels that I should not work or go to school. _____
16. My partner does not want me to socialize with my female friends. _____
17. My partner demands sex whether I want it or not. _____
18. My partner screams and yells at me. _____
19. My partner shouts and screams at me when he or she drinks. _____
20. My partner orders me around. _____
21. My partner has no respect for my feelings. _____
22. My partner acts like a bully towards me. _____
23. My partner frightens me. _____
24. My partner treats me like a dunce. _____
25. My partner is surly and rude to me. _____

ALCOHOL AND DRUG ABUSE SECTION:

Next, could you please tell me about (*Index Partner's*) use of alcohol and drugs.

{PRTEVDK:

Has or did (*Index Partner*) ever consume alcoholic beverages, including beer or wine?

1..... Yes

2..... No **GO TO {PRT_DRU:**

8..... Don't Know

9..... Refused

{PARTALCHL:

Do you think he/she is/was an alcohol or problem drinker?

1..... Yes

2..... No

8..... Don't know

9..... Refused

{PRTRMT:

Has/had he/she ever receive formal treatment for an alcohol problem other than at Alcohol Anonymous?

1..... Yes

2..... No **GO TO {PRTOFTDK:**

8..... Don't Know **GO TO {PRTOFTDK:**

9..... Refused **GO TO {PRTOFTDK:**

{PRTRTYR:

When was the last time he/she received treatment? I just need the year.

19

98..... Don't know

99..... Refused

For the next several questions please think of the last 12 months you and (*Index Partner*) were together.

On average, how often did (*Index partner*) drink any alcoholic beverages?

{PRTOFTEV: (every day)

{PRTOFTWK: (times per week)

{PROFTMO: (times per month)

{PRTOFTYR: (times per year)

{PRTOFTNO: (none in past 12 months)

{PRTOFTDK: X (don't know)

{PRTOFTRF: X (refused)

On the days (*Index Partner*) did drink alcohol, how many did he/she have on average? Again, this is the last 12 months you were together.

{PRTYPDAY: (drinks per day #)

{PRTYPDK: X (don't know)

{PRTTYPRF: X (refused)

{PRT_DRUG:

Has/did (*Index Partner*) use(d) street drugs in the last 12 months you were together?

1 Yes

2 No **GO TO {HIT_CRTK**

8 Don't Know **GO TO {HIT_CRTK**

9 Refused **GO TO {HIT_CRTK**

{PRTDRUGS:

What drugs were they? **INTERVIEWER: ENTER CODES FOR ALL DRUGS NAMED.)**

1) Amphetamines 2)Atavan 3)Codeine 4) Coke or Cocaine 5)Crack Cocaine 6) Darvocet 7) Darvon
8) Demerol 9) Diet Pills 10) Dilaudid 11)Heroin 12) LSD 13)Methadone 14) Morphine 15)Nerve
Pills 16)PCP 17)Pain Killer 18)Percodan 19) Phenobarbital 20)Pot or marijuana 21)Sleeping Pills 22)
Over the counter stimulants or inhalants 23)Tranquilizers 24)Uppers 25)Valium, 26)Xanax 97)Other
98)Don't know 99) Refused

{PRTDRO_1: _____

{PRTDRO_2: _____

{PRTDRO_3: _____

{PRTDGTRT:

Has or did (*Index Partner*) ever receive formal treatment for a drug problem at some type of drug
treatment program other Narcotics Anonymous?

1..... Yes

2..... No **GO TO {HARM_REL**

8..... Don't Know **GO TO {HARM_REL**

9..... Refused **GO TO {HARM_REL**

{PRTDGYR:

When was the last time he/she received treatment? **ASK FOR YEAR ONLY.**

1 2 _ _

98..... Don't know

99..... Refused

{HARM_REL:

Do you think your relationship with your (*Index Partner*) is or was harmed by his/her drinking or use of
drugs?

1..... Yes

2..... No

8..... Don't know

9..... Refused

We are now changing the focus of the questions from your partner to you.

{HITCR TK:

Most families discipline their children both verbally and physically. How much were you physically punished by a parent or caretaker when you were growing up? Was it...

- 0..... Never
- 1..... Rarely
- 2..... Occasionally
- 3..... Frequently or with an object such as a belt]
- 4..... **DO NOT READ:** severely beaten or abused
- 8..... Don't know
- 9..... Refused

{MOTH_HIT:

How much was your mother physically hit by your father or her partner while you were growing up? Please, rate this on a scale of 0 to 5 with 0 being never hit and 5 being hit severely enough to cause injury.

_____ **ENTER RESPONSE FROM 0 TO 5.**

Utilization

{GO_HMO:

How many times have you gone to your military health service for your own personal health care in the last 12 months?

- _____ Number of times
- 98..... Don't know
- 99..... Refused

{OUT_HMO:

How many times have you gone outside the military health service in the past 12 months?

_____ Number of times **IF 0, GO TO {UTILGR:**

- 98..... Don't know
- 99..... Refused **GO TO {UTILGR:**

Were any of these visits for?

	Yes	No	DK	
Refused				
{HOSP1: injury	1	2	8	9
{HOSP2: mental health counseling	1	2	8	9
{HOSP3: Illness	1	2	8	9
{HOSP4: other	1	3	8	9
{HOSP_OTH: _____				

{UTILAP: - {UTILXP:

We would now like to know if you have experienced any of the following health problems for any reason and if you have been to doctor or nurse for any of these problems in the past 12 months?

	Problem				Services			
	Yes	No	DK	RF	Yes	No	DK	RF
a. Headaches	1	2	8	9	1	2	8	9
b. Fainting, Blacking or Passing Out	1	2	8	9	1	2	8	9
c. Back Pain	1	2	8	9	1	2	8	9
d. Concussion or head injury	1	2	8	9	1	2	8	9
e. Sexually Transmitted Diseases or Pelvic Inflammatory Diseases(Gonorrhea, Syphilis, Herpes, Chlamydia, HPV)	1	2	8	9	1	2	8	9
f. HIV or AIDS	1	2	8	9	1	2	8	9
g. Vaginal bleeding other than a period	1	2	8	9	1	2	8	9
h. Vaginal itch discharge or infection	1	2	8	9	1	2	8	9
i. Pelvic Pain	1	2	8	9	1	2	8	9
j. Painful Intercourse	1	2	8	9	1	2	8	9
k. Fibroids								
l. Urinary tract or bladder infection	1	2	8	9	1	2	8	9
m. High blood pressure	1	2	8	9	1	2	8	9
n. Injuries needing surgery	1	2	8	9	1	2	8	9
o. Broken Bones	1	2	8	9	1	2	8	9
p. Injuries or cuts needing stitches	1	2	8	9	1	2	8	9
q. Torn ligaments or sprains	1	2	8	9	1	2	8	9
r. Bad burns or scalds	1	2	8	9	1	2	8	9
s. Frequent loss of appetite	1	2	8	9	1	2	8	9
t. Abdominal pain	1	2	8	9	1	2	8	9
u. Gastrointestinal problems (constipation, diarrhea, digestive problems)	1	2	8	9	1	2	8	9
v. Seizures	1	2	8	9	1	2	8	9
w. Facial injuries	1	2	8	9	1	2	8	9
x. Bad cold or flu	1	2	8	9	1	2	8	9

That is the last question in that series. Now, I have a few questions about your use of alcohol and drugs.

{SMOKE:

Do you currently smoke cigarettes?

1..... Yes

2..... No

8..... Don't know

9..... Refused

{EVDK:

Have you ever consumed alcoholic beverages, including beer or wine?

1..... Yes

2..... No **GO TO USE_OTCD**

8..... Don't know

9..... Refused

{DRINK:

Have you ever felt that you should cut down on your drinking?

1..... Yes

2..... No **GO TO {CRIT_DRK**

8..... Don't know **GO TO { CRIT_DRK**

9..... Refused **GO TO { CRIT_DRK**

{DRINK_YR:

When was the first time you felt this way? What was the year?

1 9 _____

08..... Don't know

09..... Refused

{CRIT_DRK:

Have you ever felt annoyed by people criticizing your drinking?

1..... Yes

2..... No

8..... Don't know

9..... Refused

{GLT_DRK:

Have you ever felt bad or guilty about your drinking?

1..... Yes

2..... No

8..... Don't know

9..... Refused

{MORN_DRK:

Have you ever taken a drink first thing in the morning (Eye-opener) to steady your nerves or get rid of a hangover?

1..... Yes

2..... No

8..... Don't know

9... Refused

{NUM_DRK:

How many drinks must you have before you begin to feel drunk?

_____ Number of drinks

998..... Don't Know

999..... Refused

On average, how often do you drink any alcoholic beverages?

{DKOFTEV: ____ (every day)
{DKOFTWK: ____ (times per week)
{DKFTMO: ____ (times per month)
{DKOFTYR: ____ (times per year)
{DKOFTNO: ____ (none in past 12 months)
{DKOFTDK: X (don't know)
{DKOFTRF: X (refused)

On the days that you drink alcohol how many drinks do you have on average?

{DKTYPDAY: ____ (drinks per day #)
{DKTYPDK: X (don't know)
{DKTYPRF: X (refused)

{USE_OTCD:

In the last twelve months, have you used prescription or over the counter drugs for pain, nerves, being depressed, or having trouble sleeping?

1..... Yes
2..... No **GO TO USEDUGS**
8..... Don't Know **GO TO USEDUGS**
9..... Refused **GO TO USEDUGS**

{OTC_DRUG

What were they?

1) Amphetamines 2)Atavan 3)Codeine 4) Coke or Cocaine 5)Crack Cocaine 6) Darvocet 7) Darvon
8) Demerol 9) Diet Pills 10) Dilaudid 11)Heroin 12) LSD 13)Methadone 14) Morphine 15)Nerve
Pills 16)PCP 17)Pain Killer 18)Percodan 19) Phenobarbital 20)Pot or marijuana 21)Sleeping Pills 22)
Over the counter stimulants or inhalants 23)Tranquilizers 24)Uppers 25)Valium, 26)Xanax 97)Other
98)Don't know 99) Refused

{OTCOTH_1: _____
{OTCOTH_2: _____
{OTCOTH_3: _____

{USEDUGS:

Have you used street drugs in the last 12 months?

1..... Yes
2..... No **GO TO HARMREL2**
8..... Don't know **GO TO HARMREL2**
9..... Refused **GO TO HARMREL2**

{DRUGS:

What were they?

1) Amphetamines 2)Atavan 3)Codeine 4) Coke or Cocaine 5)Crack Cocaine 6) Darvocet 7) Darvon
8) Demerol 9) Diet Pills 10) Dilaudid 11)Heroin 12) LSD 13)Methadone 14) Morphine 15)Nerve
Pills 16)PCP 17)Pain Killer 18)Percodan 19) Phenobarbital 20)Pot or marijuana 21)Sleeping Pills 22)
Over the counter stimulants or inhalants 23)Tranquilizers 24)Uppers 25)Valium, 26)Xanax 97)Other
98)Don't know 99) Refused

{DRUG0_1: _____

{DRUG0_2: _____

{DRUG0_3: _____

{DRUGTRMT:

Have you ever received treatment for a drug problem other than at Narcotics Anonymous? By
treatment, we mean detoxification or counseling.

1..... Yes

2..... No

8..... Don't Know

9..... Refused

{HARMREL2:

Do you think your marriage or love relationship with (*Index Partner*) has been harmed by your drinking
or use of drugs?

1..... Yes

2..... No

8..... Don't know

9..... Refused

{PTSDB_A: - {PTSD_FF:

I am going to read a list of experiences people sometimes have. I would like you to tell me whether each
experience has bothered you a little, a lot, a little, or not at all in the past seven days, including today.
In the past 7 days, including today, how much have you been bothered by.... **READ ITEM**

Insert SCL-90-R ITEMS (PTSD): 3,12,13,14,15,17,18,23,24,28,29,30,32,38,39,41,44,45,51,54,56,
59,66,68,70,79,80,81,82,84,86,89

INSTRUCTIONS:

Below is a list of problems people sometimes have. Please read each one carefully, and blacken the circle that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Blacken the circle for only one

number for each problem and do not skip any items. If you change your mind, erase your first mark carefully. Read the example before beginning, and if you have any questions please ask them now.

A LOT

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	
1	0	1	2	3	4	HOW MUCH WERE YOU DISTRESSED BY: Bodyaches

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	HOW MUCH WERE YOU DISTRESSED BY:
1	0	1	2	3	4	Headaches
2	0	1	2	3	4	Nervousness or shakiness inside
3	0	1	2	3	4	Repeated unpleasant thoughts that won't leave your mind
4	0	1	2	3	4	Faintness or dizziness
5	0	1	2	3	4	Loss of sexual interest or pleasure
6	0	1	2	3	4	Feeling critical of others
7	0	1	2	3	4	The idea that someone else can control your thoughts
8	0	1	2	3	4	Feeling others are to blame for most of your troubles
9	0	1	2	3	4	Trouble remembering things
10	0	1	2	3	4	Worried about sloppiness or carelessness
11	0	1	2	3	4	Feeling easily annoyed or irritated
12	0	1	2	3	4	Pains in heart or chest
13	0	1	2	3	4	Feeling afraid in open spaces or on the streets
14	0	1	2	3	4	Feeling low in energy or slowed down
15	0	1	2	3	4	Thoughts of ending your life
16	0	1	2	3	4	Hearing voices that other people do not hear
17	0	1	2	3	4	Trembling
18	0	1	2	3	4	Feeling that most people cannot be trusted
19	0	1	2	3	4	Poor appetite
20	0	1	2	3	4	Crying easily
21	0	1	2	3	4	Feeling shy or uneasy with the opposite sex
22	0	1	2	3	4	Feelings of being trapped or caught
23	0	1	2	3	4	Suddenly scared for no reason
24	0	1	2	3	4	Temper outbursts that you could not control
25	0	1	2	3	4	Feeling afraid to go out of your house alone
26	0	1	2	3	4	Blaming yourself for things
27	0	1	2	3	4	Pains in lower back
28	0	1	2	3	4	Feeling blocked in getting things done
29	0	1	2	3	4	Feeling lonely
30	0	1	2	3	4	Feeling blue
31	0	1	2	3	4	Worrying too much about things
32	0	1	2	3	4	Feeling no interest in things
33	0	1	2	3	4	Feeling fearful
34	0	1	2	3	4	Your feelings being easily hurt
35	0	1	2	3	4	Other people being aware of your private thoughts
36	0	1	2	3	4	Feeling others do not understand you or are unsympathetic
37	0	1	2	3	4	Feeling that people are unfriendly or dislike you

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	
38	0	1	2	3	4	Having to do things very slowly to insure correctness
39	0	1	2	3	4	Heart pounding or racing
40	0	1	2	3	4	Nausea or upset stomach
41	0	1	2	3	4	Feeling inferior to others
42	0	1	2	3	4	Soreness of your muscles
43	0	1	2	3	4	Feeling that you are watched or talked about by others
44	0	1	2	3	4	Trouble falling asleep
45	0	1	2	3	4	Having to check and double-check what you do
46	0	1	2	3	4	Difficulty making decisions
47	0	1	2	3	4	Feeling afraid to travel on buses, subways, or trains
48	0	1	2	3	4	Trouble getting your breath
49	0	1	2	3	4	Hot or cold spells
50	0	1	2	3	4	Having to avoid certain things, places, or activities because they frighten you
51	0	1	2	3	4	Your mind going blank
52	0	1	2	3	4	Numbness or tingling in parts of your body
53	0	1	2	3	4	A lump in your throat
54	0	1	2	3	4	Feeling hopeless about the future
55	0	1	2	3	4	Trouble concentrating
56	0	1	2	3	4	Feeling weak in parts of your body
57	0	1	2	3	4	Feeling tense or keyed up
58	0	1	2	3	4	Heavy feelings in your arms or legs
59	0	1	2	3	4	Thoughts of death or dying
60	0	1	2	3	4	Overeating
61	0	1	2	3	4	Feeling uneasy when people are watching or talking about you
62	0	1	2	3	4	Having thoughts that are not your own
63	0	1	2	3	4	Having urges to beat, injure, or harm someone
64	0	1	2	3	4	Awakening in the early morning
65	0	1	2	3	4	Having to repeat the same actions such as touching, counting, or washing
66	0	1	2	3	4	Sleep that is restless or disturbed
67	0	1	2	3	4	Having urges to break or smash things
68	0	1	2	3	4	Having ideas or beliefs that others do not share
69	0	1	2	3	4	Feeling very self-conscious with others
70	0	1	2	3	4	Feeling uneasy in crowds, such as shopping or at a movie
71	0	1	2	3	4	Feeling everything is an effort
72	0	1	2	3	4	Spells of terror or panic
73	0	1	2	3	4	Feeling uncomfortable about eating or drinking in public
74	0	1	2	3	4	Getting into frequent arguments
75	0	1	2	3	4	Feeling nervous when you are left alone
76	0	1	2	3	4	Others not giving you proper credit for your achievements
77	0	1	2	3	4	Feeling lonely even when you are with people
78	0	1	2	3	4	Feeling so restless you couldn't sit still
79	0	1	2	3	4	Feelings of worthlessness
80	0	1	2	3	4	The feeling that something bad is going to happen to you
81	0	1	2	3	4	Shouting or throwing things
82	0	1	2	3	4	Feeling afraid you will faint in public
83	0	1	2	3	4	Feeling that people will take advantage of you if you let them
84	0	1	2	3	4	Having thoughts about sex that bother you a lot
85	0	1	2	3	4	The idea that you should be punished for your sins
86	0	1	2	3	4	Thoughts and images of a frightening nature
87	0	1	2	3	4	The idea that something serious is wrong with your body
88	0	1	2	3	4	Never feeling close to another person
89	0	1	2	3	4	Feelings of guilt
90	0	1	2	3	4	The idea that something is wrong with your mind

{HOSP_NGT:

In the last 12 months, have you had to stay in the hospital overnight as a result of an injury?

- 1..... Yes
- 2..... No
- 8..... Don't know
- 9..... Refused

{EMERG_RM:

Have you gone to the emergency room in the last 12 months?

- 1..... Yes
- 2..... No
- 8..... Don't know
- 9..... Refused

QUESTIONS {DR_ABUSE AND {DR_HELP PERTAIN ONLY TO RESPONDENTS WHO REPORTED ABUSE.

{DR-ABUSE:

Have you ever talked about your abuse with your doctor, nurse practitioner, or physician's assistant?

- 1..... Yes
- 2..... No **SKIP TO DR_WHY**
- 8..... Don't Know **SKIP TO DOCASK_7**
- 9..... Refused **SKIP TO DOCASK_7**

{DR_HELP:

How helpful was your doctor or nurse? Were they...

- 1..... Not helpful
- 2..... A little helpful
- 3..... Somewhat helpful
- 4..... Entirely helpful

{SKIP TO DOCASK_7.

{DR_WHY.

Why haven't you ever talked about abuse with your doctor, nurse practitioner, or physician assistant?

{DOCASK_7:

When an active duty woman's safety is an immediate issue, doctors and nurses are required to report the partner abuse to the Family Advocacy Program who then reports it to the active duty woman's Commanding Officer. Do you think doctors and nurses should ask all women at all visits if they are being physically or sexually abused?

- 1..... Yes
- 2..... No
- 8..... Don't know
- 9..... Refused

We are interested to know how active duty women who experience abuse can be assisted. Every woman's perspective is unique and valuable. Please tell me if you agree or disagree with the following things. If doctors or nurses routinely asked all active duty women if they are being abused...

		Agree	Disagree	DK	RF
{DOCASK_1:	women would be offended or embarrassed.	1	2	8	9
{DOCASK_2:	women who <u>are not being abused</u> would be insulted	1	2	8	9
{DOCASK_3:	if <u>doctors</u> asked women routinely if they are being abused, it would be easier for abused women to get help	1	2	8	9
{DOCASK_5:	it would put women at more risk for BEING hurt by their abuser	1	2	8	9
{DOCASK_6:	women would be glad someone took an interest	1	2	8	9
{DOCASK_8:	women who are being abused would be more likely not to inform the doctor or nurse	1	2	8	9
{DOCASK_9:	women would fear a negative effect on their military career if they disclosed to the doctor that they are being abused	1	2	8	9
{DOCASK_10:	women would fear a negative effect on their partner's military career if they disclosed to the doctor that they are being abused	1	2	8	9

As we said before, when a woman's safety is an immediate issue, doctors and nurses are required to report the partner abuse to the Family Advocacy Program who then reports it to the active duty woman's Commanding Officer. When doctors and nurses are informed by active duty women that they are being abused, do you agree or disagree that the following things happen.

		Agree	Disagree	DK	REF
{REQLAW_1:	Women would find it easier to get help.	1	2	8	9
{REQLAW_2:	Women would be at greater risk for being abused	1	2	8	9
{REQLAW_3:	Women would like having someone else be responsible for calling the police	1	2	8	9
{REQLAW_4:	Women would be less likely to tell their health care provider about the abuse	1	2	8	9
{REQLAW_5:	Women would resent losing control over when to call the police	1	2	8	9
{REQLAW_6:	Women's career would be damaged	1	2	8	9
{REQLAW_7:	Partner's career would be damaged	1	2	8	9

{REPRT_4: Do you think that the military's policy of mandatory reporting should remain the same?

1.... Yes

2.... No

8.... Don't know

9.... Refused

{RESPABUS:

Which one do you think is most helpful to active duty women who are experiencing partner abuse...

- 1..... The doctor or nurse are required to report the abuse to the Family Advocacy Program only and the report goes no further.
- 2..... It is up to the active duty woman to decide if the doctor or nurse report the abuse to the Family Advocacy Program who then makes no further reports.
- 3.... The doctor or nurse are required to report the abuse to the Family Advocacy Program who then reports to the active duty woman's Commanding Officer.
- 4.... It is up to the active duty woman to decide if the doctor or nurse report the abuse to the Family Advocacy Program who then reports to her Commanding Officer.
- 8..... Don't know
- 9..... Refused

{REP_FROM:

Who do you think should report partner abuse to the Family Advocacy Program? **You may choose more than one option....**

- 1.... Victim of abuse
- 2.... Military police
- 3.... Doctor or Nurse
- 4.... Commanding Officer
- 5.... Other Specify: _____
- 8.... Don't know
- 9.... Refused

{REPT_1:

Once the Family Advocacy has received a report of partner abuse, do you think they should routinely refer this to the military police or civilian police?

- 1..... Yes
- 2..... No
- 8.... Don't know
- 9.... Refused

{REPT_2:

Once the Family Advocacy has received a report of partner abuse, do you think they should routinely refer this to the active duty woman's Commanding Officer?

- 1..... Yes
- 2..... No
- 8.... Don't know
- 9.... Refused

{REPT_3:

Once a woman has disclosed she is abused to a health care provider, do you think it would be helpful if there was no mandatory reporting to either the Family Advocacy Program or Commanding Officer and that all information about the abuse remains confidential with their health care providers?

- 1..... Yes
- 2..... No

8.... Don't know

9.... Refused

{SERVABUS:

What services should the military offer that would be helpful to women abused by their partners?
(It could be any type of services you think your health plan should offer)

{MORENOTE: _____

{TERMINATE: MID-INTERVIEW REFUSAL

{DATE2: DATE INTERVIEW ENDED

TOTTIME: TOTAL INTERVIEW TIME IN MINUTES

{MAILADDR:

I would like to thank you very much for your time and cooperation. You have been very helpful to our study. Have a nice day!

Appendix 4: Jones et al (1999)

Annual and Lifetime Prevalence of Partner Abuse in a Sample of Female HMO Enrollees

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Abstract Self-reported data from a survey of roughly 1,100 female health maintenance organization enrollees in the Washington, DC, metropolitan area are used to investigate the lifetime and annual prevalence of emotional, physical, and sexual abuse by intimate partners. The sample consists of a racially balanced and, for the most part, well-educated group of working women. Three dimensions of abuse based on responses to questions from a modified version of the Abuse Assessment Screen are employed. In addition to simple descriptive analyses, logistic regression was performed. The estimated annual prevalence is lower than estimates reported in other studies. However, lifetime prevalence is very similar to estimates found in primary care clinical samples and somewhat higher than those derived from population-based surveys. More highly educated women report the lowest lifetime prevalence of intimate partner abuse. The finding that this sample of well-educated, middle-class working women has lifetime prevalence rates similar to those of women who are not as well off demonstrates that intimate partner abuse is not limited to disadvantaged women from vulnerable population subgroups.

© 1999 by the Jacobs Institute
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Published by Elsevier Science Inc.
1049-3867/99/\$20.00
PII S1049-3867(99)00022-5

Studies of intimate partner abuse among women in the general population have unambiguously documented that women report high rates of abuse by intimate partners at least once in their lifetimes.^{1,2} A number of studies have also documented high rates of intimate partner abuse in women using primary care and emergency care clinics³⁻⁸ and high rates of injury and other health problems associated with battered partners.^{9,10} This study provides estimates of the lifetime and annual prevalence of intimate partner abuse using self-reported data from a survey of 1,138 female HMO enrollees in the metropolitan Washington, DC, area. The sample represents a racially balanced and, for the most part, highly educated group of middle-class working women. It is also a group that many health care practitioners might expect to be at reduced risk of ever having experienced partner abuse.

PREVIOUS RESEARCH

Tables 1 and 2 summarize lifetime and annual prevalence estimates from other clinical and population-based samples. Some of the variation in estimated prevalence rates described in these tables arises from sample restrictions and definitions of abuse. In general, annual prevalence estimates from clinical samples tend to exceed those from nationally representative samples. Lifetime prevalence estimates from primary care clinics and general population surveys tend to be fairly similar, ranging from roughly 21% to 39% in the studies cited in here. When population-based samples are restricted to only those women currently residing with a male partner, estimates of annual prevalence are relatively low regardless of sample: 5.5-13.6%.⁹⁻¹² However, when the sample is not so restricted, estimates of annual prevalence rise to between 12% and 26%.¹³ These figures are even higher among younger women¹⁴ and among women whose socioeconomic status is low.³

DATA

Letters asking women to participate in a women's health survey were sent to 10,599 female enrollees of a metropolitan Washington, DC, area health maintenance organization (HMO) who were between the ages of 21 and 55 years on January 1, 1997. There was no reference to abuse in this letter. Those who were willing to participate (14%) mailed back consent forms and indicated a time(s) when and telephone number(s) where it would be convenient for them to be contacted and interviewed "in private." A description of further precautions taken to ensure the safety of all study participants is available from the authors. Because the larger study will examine health services use among these women, the mailing list was restricted to women who had been continuously enrolled in the HMO from before or on January 1, 1995, through December 31, 1997. The telephone survey team was given training about domestic violence and safety procedures before contacting the 1,476 women who consented to be interviewed by phone. On telephone contact, 271 women (18.3%) were not locatable and 66 (4.5%) refused to participate when phoned. The final sample consisted of 1,138 women who were interviewed by phone between September 1997 and March 1998.

Sample characteristics are given in the second column of Table 3. As a group, these are highly educated, middle- to upper-middle-class women. It is a racially balanced group consisting of equal proportions of white and

The sample was 1,138 women—ages 21–55—enrollees of a Washington, DC, area HMO.

Table 1. ESTIMATES OF LIFETIME AND ANNUAL PREVALENCE OF PARTNER ABUSE STUDIES BASED ON CLINICAL SAMPLES

<i>Study</i>	<i>Outcome measure</i>	<i>Sample</i>	<i>Prevalence estimate</i>
Rath et al (1989) ³	Not specified, except "abuse" was not used in the screening questions	Female patients, Sioux Falls, SD, clinics (high proportion of low-SES respondents)	Annual verbal abuse: 47% Annual minor physical abuse: 44% Annual severe physical abuse: 28%
Gin et al (1991) ⁴	Hit or hurt by significant other with whom currently living	Male & female patients, 3 university-affiliated primary care internal medicine practices	Current: 14% Lifetimes: 28% Female lifetime: 34% Male lifetime: 12% Prevalence: 7%
Martins et al (1992) ³²	Modified CTS	All women patients seen during 2-week period at family practice clinic (n = 273)	
Hamburger et al (1992) ⁵	Physical assault by partner (CTS), pushed, shoved → severe	Female patients, family practice clinic, Midwestern city	Annual: 22.7% Lifetime: 38.8%
Abbott et al (1995) ⁶	Assault, threat, or intimidation by male partner	Female patients, 2 teaching EDs, 2 hospital walk-in clinics, 1 private hospital ED	Annual prevalence (women with current male partner): 11.7% Annual prevalence (women w/o current male partner): 5.6% Lifetime: 54.2%
McCauley et al (1995) ⁸	Hit, slapped, kicked, physically hurt, or forced sexual activities by husband, ex-husband, boyfriend, or relative.	Female patients, 4 community-based, primary care internal medicine practices	Annual: 5.5% Adult lifetime: 21.4% Childhood & adult lifetime: 32.7%
Dearwater et al (1998) ⁷	Annual: physical or sexual abuse Lifetime: emotional or physical abuse	Women 18 years and older treated in community hospital emergency departments in Pennsylvania and California	Annual: 14% (CA: 17%; PA: 12%) Lifetime: 36% (CA: 44%; PA: 31%)

CTS = conflict tactics scale; ED = emergency department; SES = socioeconomic status.

African American women. Latinos and other minorities comprise a very small proportion of the women sampled, which is characteristic of the geographic area from which the sample is drawn. Ninety percent are employed either full or part time. More than half were married at the time of the survey and more than half have household incomes that exceed \$50,000/year. Just over 50% had at least one child. Unfortunately, since the HMO does not compile statistics on the demographic characteristics of their enrollees, there was no way to compare this sample with the larger population of all women enrolled in the HMO.

METHODS

Two dimensions of abuse (physical or sexual) are employed throughout this analysis based on responses to questions from a modified version of the Abuse

Table 2. LIFETIME AND ANNUAL PREVALENCE OF PARTNER ABUSE STUDIES BASED ON GENERAL POPULATION SURVEYS

Study	Outcome measure	Sample	Prevalence estimate
Straus et al (1980) ³³	CTS	National survey, U.S. women, 1975	Annual: 11.6%
Straus & Gelles (1986) ¹²	CTS	National survey, U.S. women, 1985	Annual: 12.1%
Elliott et al (1985) ¹³		National survey, U.S. women (18-24 years)	Annual: 38.8%
Plichta (1996) ⁹	Physical assault by partner (CTS), pushed, shoved → severe	National survey, U.S. women (18-64 years, currently living with or married to a man)	Annual: 8.4%
Commonwealth Fund (1993) ¹⁰	Physical abuse by spouse or partner	National survey, U.S. women (married or living with someone as a couple)	Annual: 8%
Klein et al (1993) ³⁴	"Violent Abuse" by spouse or boyfriend	Family Violence Prevention Fund National Survey, U.S. women	Lifetime: 33%
Schafer et al (1998) ¹¹	Physical assault by partner (CTS), pushed, shoved → severe	Multistage probability sample of both members of 1,635 representative married and nonmarried couples living in 48 contiguous states	Annual male to female: 5.2-13.6%

CTS = conflict tactics scale.

Assessment Screen (AAS).^{14,15} Unlike the AAS, which asks about emotional and physical abuse in the same question, respondents in this study were asked about these types of abuse separately (Figure 1, Questions 1 and 3). A woman was classified as having experienced sexual abuse if she gave a positive response to Question 5 in Figure 1. The definition of physical abuse that was used included pushing, shoving, punching, kicking, or threatening with a weapon (Question 4 in Figure 1) as well as the woman's own perception that she had been physically abused (Question 3 in Figure 1). All women who responded affirmatively to Questions 3 or 4 were considered to have experienced physical abuse. Roughly 90% of all women who were classified as having been abused responded positively to Question 4. The remaining 10% responded positively only to Question 3.

The sample includes women who were not currently intimately involved or living with a partner at the time of the interview. Those who were currently involved or living with a partner and who reported past abuse may not have been abused by their current partner. Women with previous or current romantic intimate female partners are also included in this sample. The last group accounted for <1% of the total that reported abuse by an intimate partner.

RESULTS

Lifetime Prevalence Estimates

Lifetime prevalence rates of sexual and physical abuse are presented in Column 3 of Table 3. Overall, the sample had a lifetime prevalence of 37%. Women in their thirties report the lowest overall prevalence (30.2%), whereas women in their forties report the highest (42.2%). Across racial groups, white European women report the lowest prevalence of physical and/or sexual abuse, whereas African American women report the highest. Lifetime preva-

Overall, the sample had a lifetime prevalence (for sexual and physical abuse) of 37%.

Table 3. LIFETIME AND ANNUAL PREVALENCE RATES OF PHYSICAL OR SEXUAL ABUSE BY INTIMATE PARTNERS IN A SAMPLE OF FEMALE HMO ENROLLEES

Characteristics	N	Sample mean (%)	Lifetime prevalence (%)	Annual prevalence (%)
Total sample	1,138		36.9	4.0
Age group				
21-29	73	6.4	35.7	8.2
30-39	351	30.8	30.2	5.4
40-49	514	45.2	42.2	3.5
50-56	200	17.6	35.5	1.0
Race				
White European	531	46.7	27.4	2.4
African American	531	46.7	47.1	5.8
Other minority	74	6.6	32.5	1.6
Current marital status				
Married	669	58.5	27.5	2.1
Separated or divorced	180	15.8	60.5	6.1
Never married	226	19.9	36.7	4.9
Widowed	63	5.5	69.8	14.3
Education				
HS grad*	287	25.3	49.0	4.9
Some college	467	32.4	42.2	4.6
4 years college	251	22.2	27.5	4.4
Postgraduate	227	20.1	22.9	1.3
Employment status				
Full time	847	76.8	39.5	3.9
Part time	147	13.3	26.5	4.1
Unemployed†	109	9.9	30.2	3.7
Household income				
<\$30,000	188	17.1	48.5	5.3
\$30,000-50,000	292	26.5	47.3	7.5
\$51,000-80,000	340	30.9	32.0	2.4
>\$80,000	281	25.5	27.0	1.8
Percent household income contributed by respondent				
<25%	151	13.5	22.4	2.6
25-50%	265	23.7	28.3	3.0
51-75%	269	24.1	32.7	2.6
>75%	433	38.7	50.2	5.8
No. children in household				
None	492	43.2	38.8	2.2
1	262	23.0	41.2	5.0
2	248	21.8	31.1	5.6
≥3	136	12.0	33.1	4.4

*Includes GED, 26 trade school graduates, and 16 women who did not complete high school.

†Roughly half of the women in this category reported that they are homemakers.

lence is highest for widows (70%), although the number of women who are widowed in this sample is quite small ($n = 63$). The finding that separated or divorced women have a high prevalence of intimate partner abuse (60.5%) is not surprising because abuse is often associated with marital failure as either a cause or consequence.^{7,19}

Figure 1

Partner Abuse Screening Questions

- Q.1 Have you ever as an adult been emotionally abused by a husband, boyfriend, or female partner?
1... Yes
2... No
8... Don't Know
9... Refused
- Q.2 Have you experienced any emotional abuse in the last 12 months, that is, since September of last year?
1... Yes
2... No
8... Don't Know
9... Refused
- Q.3 Have you ever as an adult been physically abused by a husband, boyfriend, or female partner?
1... Yes
2... No
8... Don't Know
9... Refused
- Q.4 Okay, this question is worded a little different. Have you ever been hit, slapped, kicked, pushed, or shoved or otherwise physically hurt by a current or previous husband, boyfriend, or female partner?
1... Yes
2... No
8... Don't Know
9... Refused
- Q.5 Have you ever, as an adult, been forced into sexual activities by a husband, boyfriend, or female partner?
1... Yes
2... No
8... Don't Know

There is a linear downward trend in lifetime prevalence of intimate partner violence as the respondent's education increases. A chi-square test indicates that women with ≥ 4 years of college report significantly lower lifetime prevalence of physical abuse ($P = .001$). Women employed full time report the highest lifetime prevalence of physical and/or sexual abuse. Women living in households with incomes under \$50,000 also report significantly higher lifetime prevalence rates. The prevalence of physical abuse increases nearly linearly with the percentage of income that women contribute to their current household. Women with no children or only one child report the highest lifetime prevalence of physical or sexual abuse.

ANNUAL PREVALENCE ESTIMATES

Annual prevalence for any type of physical or sexual abuse was 4% in this sample (Column 4 of Table 3) based on reported abuse in a 12-month period (during 1996–1997) before administration of the survey. Women in their

*Annual prevalence for
any type of physical or
sexual abuse was 4%.*

twenties report the highest annual prevalence of physical or sexual abuse. There is also a pronounced downward linear trend in annual prevalence of physical and/or sexual abuse with age. African American women have more than twice the rate of physical or sexual abuse as white women ($P < .01$). Also similar to the findings for lifetime prevalence, women who report being widows have the highest annual prevalence, whereas married women report the lowest ($P < .001$). Interestingly, the downward trend observed for education on lifetime prevalence is not observed for annual prevalence, except for women in the highest education category. Surprisingly, unemployed women have the lowest annual prevalence of physical or sexual abuse.

Women residing in households with annual incomes between \$30,000 and \$50,000 appear to be at highest risk of recent physical or sexual abuse. There is also a striking and significant difference in annual prevalence between the two lowest income groups and the two highest ($P < .005$). As with lifetime prevalence, women in the higher income categories ($> \$50,000$) report the lowest annual prevalence of intimate partner physical abuse. However, the highest income category is more protective for annual than lifetime abuse. Women with no children have an annual prevalence rate that < 0.5 the rate of women with one or more children.

LOGISTIC REGRESSION ANALYSIS

To take account of possible correlation among risk factors, logistic regression was estimated using a binary indicator of lifetime physical or sexual abuse as the dependent variable. The results of this regression are presented in Table 4. Because of the small number of women who were abused within the past year, it was not possible to conduct a similar regression analysis of annual prevalence.

In contrast to the simple descriptive results presented in Table 3, income and employment effects are nonexistent when other confounding variables are controlled. However, as was seen previously, age, race, marital status, and education are significantly associated with lifetime abuse. Moreover, the patterns seen in Table 3 persist. Risk of lifetime abuse is elevated by roughly 70% in both the 20–29-year age group and the 40–49-year age group relative to 30–39-year-olds. The elevated prevalence among 50–59-year-olds relative to this latter group is not seen in this regression. African American women experience an elevated risk of about 30%. However, this is not strongly statistically significant ($P = .09$), suggesting that when other factors are included, the strong differences observed in Table 3 are diminished. The strong elevated effects for separated, divorced, and widowed women (odds ratios 2.54, 3.99, respectively) are still observed, as is the strong diminution of effect for women with college or graduate degrees (odds ratio 0.54).

DISCUSSION

This sample's lifetime prevalence estimate of 37% is very similar to those prevalence estimates found in primary care clinical samples cited in Table 1 and somewhat higher than most of those derived from the population-based surveys reported in Table 2. However, unlike many of these other samples, this sample is highly educated and for the most part financially well off. It is composed of women whom many would assume are not likely to have experienced intimate partner abuse. The finding that these "low-risk" women have lifetime prevalence rates similar to those of women who are not as well

This sample is very similar to those prevalence estimates found in [other] surveys, [but] this sample is highly educated and for the most part financially well off.

Table 4. RISK FACTORS FOR LIFETIME PREVALENCE OF SEXUAL AND PHYSICAL ABUSE BY INTIMATE PARTNERS IN A SAMPLE OF FEMALE HMO ENROLLEES

Characteristic	Ever abused		
	Odds ratio	Confidence interval	
Age			
21-29	1.66 ^s	0.91	3.04
40-49	1.69	1.21	2.36
50-56	1.29	0.82	2.02
Race			
African American	1.32 ^s	0.96	1.81
Marital status			
Separated or divorced	2.54 [#]	1.58	4.13
Never married	1.01	0.63	1.62
Widowed	3.99 [#]	2.01	7.90
Education*			
HS grad	1.22	0.86	1.74
College grad/post grad	0.54 [#]	0.39	0.75
Employment			
Part-time	0.89	0.55	1.44
Not in labor force	1.01	0.58	1.76
Household income			
<\$30,000	1.06	0.68	1.67
\$30,000-50,000	1.21	0.83	1.78
>\$80,000	1.06	0.72	1.56
% Contribute to household income [†]			
≤25%	0.68	0.35	1.31
26-50%	0.86	0.53	1.39
51-75%	0.83	0.53	1.30
No. of children in household [‡]			
1	1.05	0.74	1.50
2	0.89	0.60	1.31
≥3	1.05	0.65	1.72

*Omitted category is the numerically largest category, women with some college education.

†Omitted category is the numerically largest category, women who contribute 80-100% of household income.

‡Omitted category is the numerically largest category, women with no children.

^sP = .1.

^{||}P = .01.

[#]P = .001.

off socioeconomically reinforces the fact that such violence is not limited to disadvantaged women. Moreover, it suggests that a large portion of the female population is at risk during some part of their lifetime for the negative psychological and physical sequelae of partner abuse.

The sample's annual prevalence estimate (4.0%) is lower than all the annual estimates reported in Tables 1 and 2. This low annual prevalence rate may reflect the high level of education and income observed in this sample. Because the income and education levels reported are current, whereas the abuse could have occurred at any time in the past, it would be expected that these factors would have their strongest influence on abuse that occurred most recently. Thus, the protective or empowering influence of education and income in enabling women to leave and/or take other actions to deter the violence would be manifested more strongly in the annual prevalence estimates for this group.

The logistic regression analysis presented in Table 4 suggests that among

characteristics associated with decreased risk of ever having been abused, education is the most important. There are several possible explanations for this finding. One is that more highly educated women have more financial resources available to them, thus enabling them to leave at the first sign that a partner is potentially violent. It is also possible that the potentially violent partner is less likely to act out toward a partner who has more freedom to leave.¹⁶⁻¹⁸ Another explanation is that education proxies some other unmeasured characteristic of one or both of the partners. More highly educated individuals may be more emotionally resourceful in negotiating and resolving conflict than their less well-educated counterparts; or more highly educated individuals may be more sensitive to the potentially negative consequences and community sanctions against batterers, particularly those that might influence occupational opportunities or social status. These speculations cannot be tested using these data because the data do not include information on the woman's educational attainment (or that of her partner) at the time of the abuse. However, this finding warrants further investigation as it may suggest new approaches to preventing intimate partner violence.

Characteristics that are associated with increased risk of lifetime abuse are age, race, and marital status. Of these, marital status is the most difficult to interpret. This is because of the uncertainty regarding the direction of causality between this characteristic and intimate partner abuse. It is not possible to determine from these data whether separation or divorce was the consequence of preexisting abuse, or whether separation or divorce triggered abusive behavior by the partner. Other research indicates that separation and divorce represent an increased risk for serious intimate partner assault.^{7,19} Findings from longitudinal studies²⁰ and studies that examined the impact of separation on intimate partner homicide^{21,22} suggest that at least part of this elevation in risk is related to increased violence when a woman leaves.

The finding that widows are four times more likely to have been abused in their lifetime is puzzling. One possible explanation for this finding is that it is a proxy for some other risk factor. Perhaps the partners of this relatively small portion of the sample were more likely to drink and drive, start fights in bars, use drugs, and engage in high-risk behaviors that increase the probability of death by homicide or accident. There is some evidence that these behaviors are associated with personality traits or psychological profiles that are also associated with a higher likelihood of intimate partner violence.²³⁻²⁵

The increased risk for women who contribute the bulk of the household income would be consistent with the status inconsistency premise first advanced by Allen and Straus.²⁶ These authors hypothesized that men who were of a lower education, job, or income category than their wives in a society that expected males to have higher status would be more prone to use violence in conflicts with their partners. This premise was supported by data from Hornung et al.,²⁷ but was not supported in other settings.²⁸ More recent work using longitudinal data found that employed men were much less likely to physically assault their partners.²⁹ However, there is some evidence that when the woman's income is very high relative to the man's, the level of violence may increase.³⁰ In the findings reported here, this variable does not necessarily reflect the woman's income contribution status at the time of the abuse. Future studies should aim to clarify these relationship dynamics.

The finding that a significantly elevated risk of physical abuse among African American women is substantially diminished when income and education are controlled for is consistent with the data of Lockhart,³¹ who suggested that race may be confounded by omitted variables such as income and education in such studies. Although there is still a 30% elevation in risk, the effect is only significant at the $P = .09$ level.

CONCLUSIONS

This study has examined the lifetime and annual prevalence of intimate partner violence in a sample of female HMO enrollees. The results for lifetime prevalence (37%) are consistent with those of previous studies despite significant differences between samples in socioeconomic status. At the same time, the annual prevalence rate in this sample was 4.0%, which is lower than estimates from previous studies. The lifetime prevalence results provide further evidence that intimate partner violence is prevalent among women of all ages and income categories and represents a significant risk to U.S. women in general. The annual prevalence results suggest that younger women are most likely to be currently at risk.

In this sample, more highly educated women were least likely to report ever having been abused. This effect persists even when other risk factors including income are controlled for. It suggests that education is protective against intimate partner violence over and above whatever empowerment might be derived from the higher income associated with higher education. A better understanding of this finding could provide valuable guidance in formulating future programs that aim to prevent intimate partner violence. Future research should be directed to elucidate the role of higher education in reducing the risk of ever having experienced intimate partner abuse.

[Results] suggest that education is "protective" against intimate partner violence.

ACKNOWLEDGMENT

This research was supported by U.S. Army Research Materiel and Command (USAMRMC), DAMD 17-96-1-6310/RCS DD-HA(OT)2068. Any errors are the authors' own.

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Appendix 5: Gielan et al (in review)

4/12/00 *****DRAFT NOT FOR DISTRIBUTION*****

**Domestic Violence Screening and Reporting by Health Care Providers:
Women's Opinions and Policy Preferences**

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This research was supported by U.S. Army Research Materiel and Command (USAMRMC), DAMD 17-96-1-631/RCS DD-HA(OT)2068. Any errors are the authors' own.

ABSTRACT

Despite considerable attention in the popular and professional media about health care provider (HCP) roles and responsibilities for treating domestic violence (DV), the patient's perspective has not been well represented. The purpose of this paper is to describe women's opinions and policy preferences concerning DV screening and mandatory reporting.

Women enrolled in a large metropolitan HMO (N=2005) were screened by telephone survey for physical or sexual abuse, with 202 abused women identified as cases and 240 non-abused women randomly selected as controls.

Overall, 48% of the sample agreed that HCPs should routinely screen all women, with abused women 1.5 times as likely as non-abused women to support this policy. For mandatory reporting, 48% preferred that it be the woman's decision to report abuse to the police, with abused women being 1.4 times as likely as non-abused women to endorse this policy. The vast majority of women thought it would be easier for abused women to get help with routine screening (86%) and mandatory reporting (73%), although concerns that women would be at increased risk for abuse were also expressed for both screening (43%) and reporting (52%). Concerns were also raised that women would be offended or embarrassed (49%), or insulted (28%) by routine screening and that abused women would be less likely to tell their HCP about the abuse under a policy of mandatory reporting (67%).

Domestic violence policies and protocols must find ways to minimize harms and maximize benefits associated with routine screening and mandatory reporting. Interventions offered in managed care settings that would be well received, according to the women in this study, include confidential counseling services, shelters and hot lines.

INTRODUCTION

It is now well established that domestic violence is a widespread problem with serious consequences for women's physical and mental health (Campbell & Lewandowsky, 1997; Plichta, 1996). Both population based and health care setting studies of women demonstrate a 5-15% past year and a 25-30% lifetime prevalence of intimate partner violence with significantly increased risk of gynecological and gastrointestinal symptoms, visits to the health care system, and depressive symptoms (Commonwealth Fund, 1999; Jones et. al., 1999; McCauley et. al., 1996). It has been pointed out that without identification, abused women are denied documentation for future reference in court cases, education on prevention, safety planning,

options for leaving the abuse and referrals to resources in the community (Campbell & Parker, 1997). The lack of identification of battered women is potentially an added cost to an already overwhelmed health care system (Miller, Cohen & Wiersema, 1996; Wisner et. al., 1999). As a result, many professional health care organizations have called for routine screening of women for intimate partner violence (ACOG, 1989; ACNMW, 1987; ANA, 1991, 1994; AWHONN, ENA, FVPF, 1999). In addition, several states have mandated that health care providers report intimate partner violence to police (Glass & Campbell, 1998; Hyman & Schillinger, 1995). Both screening and mandatory reporting are controversial because of a lack of demonstrated effectiveness in reducing the risk of violence and concerns about infringing on women's autonomy (Chalk & King, 1998, Glass & Campbell, 1998; Hayden, Mooney & Rodriguez, 1996; Hyman & Chez, 1994; Mooney & Rodriguez, 1996). These debates about screening and reporting protocols should be informed by an understanding of women's policy preferences. Incorporating the perspective of the target audience in policy development is not only respectful of individuals' autonomy and privacy, but it should also lead to initiatives that are supported by the target audience and thus more likely to reach their goal of protecting women from further abuse. Unfortunately, we know little about what women prefer and believe regarding DV screening and reporting in health care settings. The present study seeks to address this gap in the literature. The purposes of this paper are to 1) describe women's opinions and policy preferences concerning domestic violence screening and mandatory reporting in health care settings; 2) compare these opinions and preferences between abused and non-abused women; 3) examine the extent to which sociodemographic characteristics and disclosure of abuse are associated with women's opinions and policy preferences; and 4) describe women's preferences for services

HMO's should provide to abused women.

LITERATURE REVIEW

This review will concentrate on research related to routine screening and mandatory reporting, as well as a few studies that have queried women's perceptions about the health care system's response to intimate partner violence, especially related to these two issues. Reviews of the prevalence of abuse in health care settings and the health effects of such abuse are readily available elsewhere (e.g. Campbell & Lewandowski, 1997; Jones et al, 1999).

Routine Screening. Based on two decades of studies that have examined the issue of identifying abused women, it is clear that the prevalence of intimate partner violence is far greater than what is identified by health care providers in any setting (e.g. Stark, Flitcraft & Frazier, 1979; McLeer & Anwar, 1987; Dearwater et. al., 1998; Wiist & McFarlane, 1999). Although training increases detection, rates remain low, which is thought to relate to most physicians and nurses not routinely screening for abuse (Campbell et. al., in press; McLeer & Anwar, 1989; Rodriguez et. al., 1999). Until recently, most training of health care professionals did not stress routine, universal screening (Campbell et. al., in press). Rodriguez, Bauer and colleagues (1999) found that although the majority (79%) of 400 physicians in California routinely screened injured women for abuse, 17% of physicians or fewer screened for abuse in private or managed care settings. The study used a stratified sample of physicians and had a 69% response rate but did not include mental health providers. It has been found that changing forms to include the questions from the Abuse Assessment Screen (AAS) and thus systematizing routine assessment significantly increased the prevalence of DV detected and provider satisfaction in an adolescent prenatal care setting (Covington et. al., 1997). Similarly, the AAS

detected significantly more violence in the prior year (15% vs 3%) and during the current pregnancy (10% vs 1%) when incorporated as part of the regular prenatal care assessment forms, in a quasi experimental comparison to a routine social service evaluation (Wiist & McFarlane, 1999). The mode of screening may also influence disclosure. Face to face assessment of DV with the AAS was found to obtain the highest prevalence of abuse in a family planning setting with Hispanic and Anglo women (McFarlane et. al., 1991). In contrast, in an ED study, prevalence was significantly higher with self rather than nurse administration, again using the AAS (Glass et. al., in press). In a third investigation, this time in a post partum inpatient setting, mode of screening interacted with ethnicity of respondent (Torres et. al., in press). African American and Puerto Rican women were more likely to disclose abuse in a face to face interview, while Anglo women were more likely to disclose on a written self-report questionnaire, and Mexican, Cuban and Central American women did not differ significantly on rates of disclosure by survey administration method. In an anonymous survey of 243 women in one urban and one suburban ED, only 25% of currently or formerly abused women said they would volunteer the information, while 36% said they would disclose if asked directly, and 9% said they would not disclose at all, even if asked (Hayden, Barton & Hayden, 1997).

The structure of the health care system and characteristics of providers were also perceived to be barriers to seeking and receiving health care related to abuse in two small qualitative studies with battered women (Campbell et. al., 1994; McCauley et. al., 1998). One abused woman stated about her ED experience that, "it is not part of their job, they are there to fix injuries."

In the two available studies of women's attitudes specifically about routine screening,

both Glass and colleagues (in press) and Parsons and colleagues (1998) found the overwhelming majority (80-90%) of women in favor of screening. Parsons and colleagues (1998) reported that the majority of 200 women (92%) coming to a private OB/GYN practice said they would not be offended if routinely asked about DV. In the one available comparison of abused and not abused women's attitudes on the issue, a large (N = 1128) sample of women from 11 community ED's were queried in an anonymous survey (Glass et. al., in press). Women coming to the ED because of abuse (acutely abused) and women who were physically or sexually abused in the past year were significantly less likely to agree with routine screening than women who had never been abused or reported lifetime abuse only. However, the vast majority of all categories of women (80-97%) did agree with routine screening for DV by Emergency department staff.

Mandatory Reporting. Mandatory reporting of individual domestic violence cases to the criminal justice system has been adopted as state law in six states (Glass & Campbell, 1998; Hyman, Schillinger & Lo, 1995). To date there have been no empirical investigations of the efficacy of mandatory reporting in terms of women's safety or other relevant outcomes. Consequently, many experts have recommended no further legalization of mandatory reporting until such evaluations have been completed (Chalk & King, 1998; Glass & Campbell, 1998; Hyman & Chez, 1994) and have pointed out the ethical dilemmas for providers around mandatory reporting such as respecting patient autonomy (Freed & Drake, 1999). In fact, using data from the same survey described above, Rodriguez, McLoughlin and colleagues (1999) found that the majority (71%) of California physicians said they might not report domestic violence to the police if their patient objected. In interviews of a representative sample of 25 California criminal justice agencies, Lund (1999) found that calls from health care providers were less than

20% of their DV caseload for 84% of the agencies. Even though California law requires both a written and telephone report and only a telephone report actually triggers a police response, fewer than 25% of the agencies routinely received both. From four prior studies asking women for their opinions on mandatory reporting, mixed opinions were apparent. Although 80% of 45 abused women interviewed from a community outreach advocacy program said health care providers should be mandated to report abuse to criminal justice authorities, only 57% said it would have helped them and 49% said it would make their partners angrier (Coulter & Chez, 1997). Although the overwhelming majority of nonabused women (92%) in the Glass and colleagues emergency department study (in press) agreed with mandatory reporting to police, significantly fewer of the acutely abused (76%) and women abused during the prior year (82%) did so. Hayden and colleagues (1997) found that 39% of currently or formerly abused women in their Emergency department study would not disclose abuse if they knew that the physician was requiremergency department to report the abuse to police. In a focus group study, Mooney and Rodriguez (1996) reported that abused women's concerns about disclosure related to issues of their personal autonomy and safety.

Thus, although there are some data about routine screening and mandatory reporting from the perspective of health care providers and women, the emphasis has been on women seen in emergency departments or has used analysis without appropriate comparison groups or other statistical controls. Women enrolled in managed care settings have seldom been queried and for the most part, the questions have not included the full range of subtleties involved in understanding the perceptions and preferences of women. As stated by Coulter and Chez (1997), we need far more exploration of the viewpoints of battered women before policy is enacted on

such issues as mandatory reporting by health care providers. In our case control study of a large ethnically diverse sample of women in a managed care setting, we incorporated some of the issues of patient preference, autonomy and safety suggested in the literature and were able to compare abused and not abused women, and examine differences in opinions and preferences by women's sociodemographic characteristics and whether or not the abused women had disclosed their abuse to a health care provider.

METHODS

Subject Recruitment. Letters asking women to participate in a women's health survey were sent to a total of 21,426 female enrollees of a metropolitan Washington, DC area HMO in two separate interview waves held in Fall 1997 and Fall 1998. Women were selected if they were between the ages of 21 and 55 at the time of the recruitment and, for the purpose of examine health services use among these women, enrolled continuously in the HMO from 1995 through 1997. For safety reasons, there was no reference to "abuse" in the recruitment letter. Twelve percent or 2535 women expressed interest in participating by mailing back consent forms and indicated a time(s) and telephone number(s) where it would be convenient for them to be contacted and interviewed "in private." The telephone survey team was given training about domestic violence and safety procedures prior to contacting these 2535 women who consented to be interviewed by phone. A description of further precautions taken to ensure the safety of all study participants is available from the authors. The study was approved by the Johns Hopkins University Joint Committee on Clinical Investigation and the participating HMO's IRB.

In attempting to make telephone contact, 447 (17.6%) women could not be located and 76 (3.05%) refused to participate when phoned. In breaking down the 76 refusals, 64 (84%)

prospective study participants refused prior to the onset of the interview giving no reason for refusing or stating they were too busy. The other 15% interrupted the interview while in progress and refused to complete it. Four of the twelve women who refused part way through the screening interview indicated that it was too difficult to talk about abuse. The remaining eight women did not provide a specific reason. The final sample consisted of 2005 women who were screened for abuse by phone.

Definition of Cases and Controls. Two dimensions of abuse (physical or sexual) screening were employed from a modified version of the *Abuse Assessment Screen* (AAS)⁽¹⁴⁾,⁽¹⁵⁾. First, women were considered to have been physically abused if they answered yes to either of the following two questions: "Have you ever as an adult been physically abused by a husband, boyfriend, or female partner?" "Have you ever been hit, slapped, kicked, pushed, or shoved or otherwise physically hurt by a current or previous husband, boyfriend, or female partner?" Women were classified as having been sexually abused if they gave a positive response to "Have you ever, as an adult, been forced into sexual activities by a husband, boyfriend, or female partner?" Women who reported having been physically or sexually abused since 1989 were selected as a case. Women with no reported lifetime history of abuse i.e., having answered no to all three of these questions were randomly selected as controls.

Sample. Women who have been identified as a case or randomly selected as a control were asked to participate in the in-depth portion of the interview after successfully completing the screening interview. This portion of the interview took an average of 25 minutes to complete. Among the 231 cases asked to participate, 202 (87.4%) completed the in-depth interview and 29 (12.6%) refused to go on after completing the screening interview. Similarly,

of the 264 controls asked to participate in the long interview, 240 (90.9%) were interviewed and 24 (9.1%) selected for the in-depth interview refused to participate in the in-depth interview. The sample of 202 cases and 240 controls are the focus of analysis in this paper.

Measures. In addition to standard demographic variables, the survey included items developed by the authors previously in consultation with the Family Prevention Fund and modified from prior studies (Glass & Campbell, under review) to measure women's opinions, which were operationalized as beliefs about the consequences routine screening and mandatory reporting. This section of the interview was introduced by reading, "We are interested to know how women who experience abuse can be assisted. Every woman's perspective is unique and valuable. Please tell me if you agree or disagree with the following items." ***Beliefs about the consequences of routine screening*** were measured by reading women a series of six items that asked them "If doctors or nurses routinely asked women if they are being abused...." (See Table 2 for specific items). Women's ***policy preference for routine screening*** was then ascertained with a single yes/no item, "Do you think doctors and nurses should ask all women at all visits if they are being physically or sexually abused?"

For ***beliefs about the consequences of mandatory reporting***, women were then read the following introduction, "If health care providers were required by law to report abuse to the police, do you agree or disagree that the following will happen" and five items followed (Table 2). Women's ***policy preference for mandatory reporting*** was ascertained by the following item: "Two ways have been proposed for how health providers should respond when a woman says she is abused. I'd like to know which one you think is better: The health care provider is required by law to report the abuse to the police; or It is up to the woman to decide if the health provider

reports the abuse to the police.”

We also asked abused women if they had ever talked about their abuse with a health care provider, and if so, to rate how helpful they were on a 4-point scale from not helpful to entirely helpful. A final open-ended item was included, asking abused women what services they thought their health plan should offer to help abused women. Interviewers recorded verbatim responses, which were data entered, coded, and tallied.

Statistical analyses. To answer our research questions concerning belief differences and policy preferences of our cases and controls, we employed multivariate regression for significance testing and adjustment methods to obtain prevalence rates. Our cases and controls were significantly different in education, income, race and marital status (Table 1). Therefore, all comparisons of these two groups had to account for these differences.

Regression: All statistical testing for differences in beliefs and policy preferences between cases and controls was accomplished by employing methods of multiple logistic regression which allowed us to examine the association of case/control status while adjusting for the variables on which the two groups differed. All regression models contained indicator variables for case or control status, race, education, and marital status. We determined that a difference between cases and controls was significant when the beta representing case/control status was statistically significant at the $p < 0.05$ level when all variables were in the regression model. Odds ratios and 95% Confidence Intervals are presented for all statistically significant variables. When comparing within cases those who disclosed their abuse to a health care provider versus those who did not (Table 4), Chi-square statistics computed on the unweighted data were used.

Standardization: When calculating the proportions for the two groups of women holding certain beliefs or preferring certain policies, we employed methods of direct adjustment to account for the differences in the two samples with respect to education, race, income, and marital status (Harold Kahn and Christopher Sempos, Statistical Methods in Epidemiology, New York, Oxford University Press, 1989). For the direct adjustment to obtain proportions for our cases and controls, we identified a 'standard' population that would ensure comparability on education, race, income, and marital status (Kahn and Sempos 1989). We choose as our standard population the group of women who were screened for eligibility for our study (N=2005). This standard population was thought to be ideal as they represent the population that we wish to generalize our results to, that is a group of active HMO participants. To accomplish our standardization, we assigned weights to each of the cases and controls. We obtained our weights by stratifying the cases and controls, separately, on four adjustment variables: education (graduate degree vs. up to a four year college degree vs. high school degree or less), race (white vs. all other), annual household income (less than \$50,000 vs. \geq \$50,000), and marital status (married vs. all others). For cases, controls and the standard population, we identified the number of persons within the 24 strata of education, race, income, and marital status. We then obtained strata specific ratios of standard population to the cases and controls. We created the weights, separately for cases and controls, by applying the strata specific ratio to each person within the strata. We applied the weights such that the cases and controls would each represent half the standard population as they are approximately equal in number when not weighted. All proportions presented concerning the entire sample of cases and controls are based on the weighted data. Because the weighted data is much larger in size than our case and control

population, performing statistical tests on the weighted population would result in inappropriate p-values. Therefore, no statistical tests comparing cases and controls were performed using the weighted population. Rather, statistical tests were performed using the multivariate logistic regression method described above.

RESULTS

Sample. The sociodemographic characteristics of the sample are displayed in Table 1 and indicate that cases and controls differed significantly on all indicators except age (see Jones et. al., 2000, for discussion). Cases were less likely to be college graduates, white, married, and to have an annual household income of \$50,000 or more per year. These variables were then used to construct weights for subsequent analysis, as previously described.

Beliefs about the Consequences of Routine Screening and Mandatory Reporting. There was considerable variation in opinions related to routine screening, with a few exceptions: virtually all women (96%) agreed that they would be glad someone took an interest, 86% agreed that routine screening would make it easier for abused women to get help; and only 11% of women overall thought that women might lose their health insurance (Table 2). Forty-three percent of the sample thought that women would be at increased risk from their abuser as a result of routine screening, with more non-abused women (46%) than cases (40%) feeling this way. A minority of cases (33%) and controls (22%) believed that women who were not being abused would be insulted by routine screening.

In general, beliefs about the consequences of mandatory reporting were somewhat less uniformly favorable than those regarding routine screening. Almost three quarters of the sample thought mandatory reporting would make it easier for abused women to get help, while at the

same time, two thirds thought that women would be less likely to tell their health care provider and one half of the sample thought it would put women at increased risk from their abuser (Table 2). Although there were high rates of endorsing the statement that women would like having someone else be responsible for calling the police under the policy of mandatory reporting (86%), cases were less likely than controls to feel this way (81% vs. 90%).

Results of the multivariate logistic regression (Table 3) provide evidence of the statistical significance of these differences in opinions between the cases and controls and demonstrate additional differences between women of varied socioeconomic backgrounds as well. Adjusted for socioeconomic variables, cases relative to controls were 1.7 times as likely to believe that routine screening would insult women who are not being abused, 1.5 times as likely to believe that it would put women at more risk for being hurt by their abuser. They were half as likely to think that women would like having someone else be responsible for calling the police under the mandatory reporting scenario.

Controlling for abuse status and other sociodemographic variables , White women relative to women of other ethnic groups were more likely to think that routine screening would offend, embarrass, and insult women, although they were more likely to believe that mandatory reporting would make it easier for women to get help. Women with family incomes < \$50,000 relative to those with higher incomes were less than one- third as likely to think that routine screening would result in women feeling glad someone took an interest and 1.5 times as likely to think that women would resent losing control over when to call the police under the policy of mandatory reporting. Women with more education were half as likely as those with less than a college education to believe that routine screening might cause abused women to lose their health

insurance, but 1.6 times as likely to believe it would put women at more risk from their abuser. Marital status was unrelated to all but one of the items – married women were almost two-thirds less likely than other women to believe that women would resent losing control over when to call the police under the condition of mandatory reporting.

Policy Preferences for Routine Screening and Mandatory Reporting. A higher proportion of abused women than control women supported routine screening and preferred a policy under which reporting abuse is the woman's decision (Table 2). However, rates indicated a lack of uniformity in policy preferences, with fewer than one half of the sample overall, and 54% of the cases, supporting each of these policy positions. Abused women relative to control women were 1.5 times as likely to support routine screening and almost as likely (O.R.=1.4) to prefer woman-controlled reporting over mandatory reporting by health care providers, adjusting for sociodemographic variables (Table 3). Of all the sociodemographic variables examined, only ethnicity was a significant correlate of policy preferences, with White women being one half as likely as other women to prefer that reporting abuse to the police is the woman's decision.

Disclosure of Abuse to Health Care Providers. Of the 202 abused women, 51 (25.4%) had talked to a health care provider about the abuse, and of those, 9.8% said the experience was not helpful, while 74.5% said it was either somewhat or entirely helpful. Women who had not discussed their abuse with a HCP were significantly more likely than those who had to think that routine screening would put women at greater risk for being hurt by their abuser (46% vs. 29%) and that they would be less likely to tell their HCP about the abuse if there was a policy of mandatory reporting (71% vs 55%). However, they were somewhat more likely to think that mandatory reporting would make it easier for abused women to get help (77% vs 63%) (Table 4).

Policy preferences did not differ by whether or not the women had disclosed the abuse to a health care provider (data not shown).

Women's Suggestions for HMO Services. Of the total of 120 responses provided, 78 (65%) suggested that counseling services be provided for abused women. Some women elaborated on types of counseling, examples of which included mental health services, self-esteem, education on how to get help. Other frequently mentioned services were referral to shelters (16%) and hot lines (6%). Eight responses suggested addressing needs of the abusive partner, either through law enforcement and arrest or through counseling services. Five women mentioned the need for help that was confidential, non-judgemental, and respectful of women's privacy.

DISCUSSION

The results of this study are more complex to interpret than those in prior studies, reflecting a more detailed analysis and complex response set. A far lower percentage of both abused and not abused women in this managed care sample agreed with routine screening than did those in the other prior large scale survey of emergency room patients (Glass et. al., submitted). More than one-half (54.5%) of the abused women (and 41.5% of controls) felt that managed care providers should routinely screen all women for intimate partner violence at every visit. None of the sociodemographic variables we tested were significantly related to this policy preference, suggesting that a difference in sample characteristics is not a likely explanation. The difference in setting between our two studies may well be the major explanation. Women may see the emergency department as a more appropriate place for routine screening than their HMO, a sentiment apparently echoed by physicians. Although Rodriguez, Bauer and colleagues (1999)

did not survey emergency department physicians, it was only injury that would trigger screening for the majority of outpatient medical care providers surveyed. These results may reflect the widespread public concern that HMO providers are pressured to spend less time with patients, and thus would not have time for screening. It may also be that in the absence of injuries, which are much more likely to be observed in the emergency department, domestic violence screening is not an obviously important issue for either physicians or women themselves in the process of care for other health problems.

The lower percentage of women supportive of the routine screening policy in this study relative to Glass et al (in press) may have been the result of more carefully considered responses on the part of women in our sample. We asked women for their opinion after a series of items that required them to think about potential positive and negative consequences of routine screening. The lowered enthusiasm we found may reflect some of the real complexities of the issues that women became more aware of as they answered the prior questions. Although many health care professional organizations and experts are calling for routine screening in health care settings, most have not differentiated the interval of screening by setting and/or have been vague as to whether routine screening means universal (all women) screening. The Family Violence Prevention Fund in concert with the ANA and AMA now recommends routine universal screening for DV in emergency department's, HMO's, internal medicine, STD clinics, school health settings, prenatal care settings, gynecological visits, and substance abuse treatment (FVPPF, 1999). However, the interval recommended is at the first visit and at appropriate subsequent visits (e.g. with injuries, new partners, conditions such as depression, pregnancy, and chronic pain) rather than at each visit. Such subtleties seemed too complex for a telephone survey, but

our language of 'all' visits may have had women envisioning being screened for domestic violence when returning for a minor check of an ongoing problem after having just been screened at a visit the week before.

Nevertheless, women for whom routine screening is designed to help -- abused women -- were 1.5 times as likely as non-abused women to support routine screening, even after adjusting for sociodemographic differences between the two groups. Moreover, the vast majority of women in both groups believed that screening would make it easier for women to get help and would make women feel glad that someone was taking an interest. These results lend strong support to continuing to recommend routine screening.

Mechanisms are needed to minimize the potential negative consequences of screening that concerned women. For example, we found a much higher percentage of women saying they would be offended or embarrassed than did Parsons et. al. (1998) -- 49% vs. 8%. The difference may be due to our having added the word 'embarrassed' to 'offended' or to differences between the settings. Women in the Parson's study were from a private OB/GYN setting, whereas women in our HMO setting may feel they risk embarrassment because they have a regular primary care provider whom they see more frequently or who is connected with their workplace. More troubling is the finding that 39.5% of abused women overall and 46.1% of abused women who had not discussed their abuse with a health care provider thought routine screening would put abused women at greater risk for being hurt. This issue needs to be considered in designing and implementing screening policies. Screening protocols and patient information materials must incorporate safety planning and honest discussion with women about the safest options for them to pursue as they try to end the abuse.

Beliefs about the consequences of routine screening showed some variation by sociodemographic variables, holding constant abuse status. White women relative to women in other ethnic groups were significantly more likely think women would be offended or embarrassed, that non-abused women would be insulted, and that it would put women at more risk for being hurt by their abuser. Women with at least a college education were also more likely to endorse this latter belief. Women with more income were less likely to think that screening would make women feel glad someone took an interest. These results may suggest that DV screening raises a stigma problem for fairly well off White women relative to other subgroups of the population. Understanding how different groups of women feel about the pro's and con's of screening may be useful for framing the issue in educational materials and screening questions.

Interestingly neither abused nor non-abused women were particularly worried about losing health care insurance. This concern has been raised by DV advocates as a barrier to women disclosing their abuse and having it recorded in a medical record (Duberow, 1998). Women with more education were less concerned about this issue than others. These findings may be attributable to the fact that women in our sample were all enrolled in an HMO and thus has adequate health insurance. The question of whether a history of DV causes women to be denied health insurance is an empirical one deserving of further study.

Support for a policy of mandatory reporting was not widespread in this sample. More than one half of the abused women (53.7%) preferred a policy under which reporting abuse to the police is the woman's decision. Abused women were 1.4 times as likely as non-abused women to take this position. Given that the policy is designed to help abused women, their preferences

and concerns bear serious consideration in the design of such policies.

Consistent with these findings about the mandatory reporting as a policy option was the result that abused women were half as likely as non-abused to believe that women would like having someone else be responsible for calling the police. The loss of autonomy inherent with mandatory reporting and discussed in the literature (Freed & Drake, 1999; Hyman & Chez, 1997; Mooney & Rodriguez, 1996) was reflected in the item that women would resent losing control over when to call the police, which was endorsed by slightly more abused (45%) than non-abused women (39%). Regardless of abuse status, women with more income and women who were not married were more likely to feel this way, perhaps because such women generally experience, and thus highly value, more independence.

Two thirds of both the abused and non-abused women felt that mandatory reporting would decrease women's likelihood of disclosing their abuse to their HCP. Abused women who had not discussed their abuse with a HCP were more likely to think that mandatory reporting would make it less likely that women would disclose. These results suggest the very reasons that these particular abused women have not discussed their abuse with their HCP. They may have been experiencing more severe abuse or were more afraid to discuss their abuse. One limitation in our data is that we did not ask if a HCP had asked the women about their abuse, only if the women had ever discussed their abuse. It is not clear therefore if there was a failure of inquiry or a decision on the part of the woman not to disclose abuse with a HCP, even after being asked. However, a substantial proportion of women in this sample had in fact talked with their HCP and reported that the HCP was helpful, which lends further support to the potential benefit of routine screening.

Nevertheless, it is important to recognize that women expressed fears and concerns about negative consequences of routine screening, and even more so, for mandatory reporting. Neither routine screening nor mandatory reporting have ever been evaluated for their effects on women's safety in any kind of experimental study (Chalk & King, 1998), and this is clearly needed. Meanwhile, policy and the protocols to implement them must find ways to minimize the likelihood that more harm than good comes from routine screening and mandatory reporting. Interventions offered in managed care settings that would be well received, according to the women in this study, include counseling services, shelters and confidential hot lines.

Conclusions

Although non-abused women were not as sure about routine universal screening in this managed care setting, a slight majority (54%) of the abused women in this sample supported the practice. Both groups believed it was a way for women to get help and for health care professionals to show interest and concern about intimate partner violence. Women who had discussed their abuse with a HCP generally found this to be a helpful experience. With routine screening, women can choose to not disclose their abuse if they feel it would put them in more danger. Our finding that abused women who have not disclosed their abuse were more likely to think screening increases women's risk suggests that at least some women have taken this course. The fear of being offended, embarrassed, or at greater risk from an abuser is real and problematic for women and needs to be addressed in routine screening policies. With regard to mandatory reporting, our results suggest that women would appreciate the health care provider offering to call the police to take this responsibility for them, while at the same time there was strong support for leaving the ultimate decision about calling the police up to the woman. This

approach is respectful of the concerns for safety, autonomy, and confidentiality expressed by the abused women in this sample.

Table 1. Sociodemographic Characteristics

	CASES Abused Women N=202	CONTROLS Non-Abused Women N=240	TOTAL SAMPLE N=442	WEIGHTED SAMPLE N=1988
EDUCATION* % College Graduate	34.2	54.2	45.0	46.6
ETHNICITY* % White	40.6	55.0	48.4	53.4
MARITAL STATUS* % Married	37.1	47.5	42.8	57.6
HOUSEHOLD INCOME* % \geq \$50,000/year	39.8	57.0	49.2	60.0
AGE % < 40 years	55.0	55.8	55.4	53.9

*p<.05 by Chi-square analysis

Table 2. Women's Beliefs and Policy Preferences Concerning Routine Screening and Mandatory Reporting, Weighted Proportions

PERCENT AGREEING WITH ITEM			
CONSEQUENCES OF ROUTINE SCREENING	TOTAL SAMPLE N=1988	CASES Abused Women	CONTROLS Non-abused Women
Women would be offended or embarrassed	48.9	48.2	49.6
Women who are not being abused would be insulted	27.6	33.4	22.3
It would be easier for abused women to get help	86.1	85.2	87.0
Abused women might lose their health insurance	11.0	10.4	11.7
It would put women at more risk for being hurt by their abuser	42.9	39.5	46.3
Women would be glad someone took an interest	95.6	96.9	94.3
CONSEQUENCES OF MANDATORY REPORTING			
Women would find it easier to get help	73.1	71.5	74.7
Women would be at greater risk for being abused	52.0	54.2	50.0
Women would like having someone else be responsible for calling the police	85.8	81.1	90.4
Women would be less likely to tell their health care provider about the abuse	67.3	68.0	66.7
Women would resent losing control over when to call the police	41.7	45.0	38.6
POLICY PREFERENCES			
Agree that HCPs should routinely screen all women for physical and sexual abuse at all visits	47.8	54.5	41.5
Prefer that reporting abuse to police is the woman's decision	47.6	53.7	42.1

Table 3. Multiple Logistic Regression Analysis of Women's Beliefs and Policy Preferences Concerning Routine Screening and Mandatory Reporting among 202 Abused Women and 240 Non-abused Women, Odds Ratios, 95% Confidence Intervals

	CASE/ CONTROL STATUS Abused vs. Non-abused	ETHNICITY White vs. Other	INCOME < \$50,000 vs. ≥ \$50,000	EDUCATION ≥ College vs. Other	MARITAL STATUS Married vs. Other
BELIEFS ABOUT CONSEQUENCES AND POLICY PREFERENCES					
ROUTINE SCREENING					
Women would be offended or embarrassed	–	2.27 (1.48, 3.49)	–	–	–
Women who are not being abused would be insulted	1.72 (1.10, 2.68)	1.85(1.15, 2.97)	–	–	–
Abused women might lose their health insurance	–	–	–	0.50(0.25,1.02)	–
It would put women at more risk for being hurt by their abuser	–	1.50 (0.97, 2.32)	–	1.60 (1.03, 2.48)	–
Women would be glad someone took an interest	–	–	0.30 (0.11, 0.88)	–	–
MANDATORY REPORTING					
Women would find it easier to get help	–	1.61(0.98, 2.65)	–	–	–
Women would like having someone else be responsible for calling the police	0.50 (0.27, 0.92)	–	–	–	–
Women would resent losing control over when to call the police	–	–	1.52 (0.96, 2.42)	–	0.62 (0.4,0.9)
POLICY PREFERENCES					
Agree that health care providers should routinely screen all women for physical and sexual abuse at all visits	1.53 (1.02, 2.3)	–	–	–	–
Prefer that reporting abuse to police is the woman's decision	1.41 (0.93, 2.13)	0.54 (0.35, 0.83)	–	–	–

Table 4. Abused Women's Beliefs and Policy Preferences Concerning Routine Screening and Mandatory Reporting by Disclosure of Abuse to Health Care Provider*

	Percent Agreeing with Item		
	Disclosed	Did Not Disclose	p-value**
CONSEQUENCES OF ROUTINE SCREENING			
Women would be offended or embarrassed	47.9	60.4	0.13
Women who are not being abused would be insulted	35.4	37.7	0.86
It would be easier for abused women to get help	77.1	86.3	0.17
Abused women might lose their health insurance	12.8	9.0	0.57
It would put women at more risk for being hurt by their abuser	29.2	46.1	0.04
Women would be glad someone took an interest	91.8	95.2	0.47
CONSEQUENCES OF MANDATORY REPORTING			
Women would find it easier to get help	63.3	76.6	0.07
Women would be at greater risk for being abused	47.7	55.6	0.39
Women would like having someone else be responsible for calling the police	79.2	80.6	0.84
Women would be less likely to tell their health care provider about the abuse	55.3	71.3	0.04
Women would resent losing control over when to call the police	39.6	45.3	0.51

* N varies between 180-195 due to elimination of 'don't know' responses

** based on Chi-square analysis

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Appendix 6: Abstracts of Presentations

WOMEN'S POLICY PREFERENCES FOR DOMESTIC VIOLENCE SCREENING AND REPORTING IN CLINICAL SETTINGS

Gielen, AC, O'Campo PJ, *Campbell JC, *Schollenberger J, *Dienemann JA, *Kub J, Jones AS
School of Public Health and School of Nursing, Johns Hopkins University, Baltimore, MD

INTRODUCTION

Domestic violence is increasingly recognized as a major public health problem in the United States. Policies and guidelines for the screening and treatment of abused women are being widely promulgated. Most controversial is the policy of mandatory reporting, which has been adopted by at least six states to date. What has been missing from public policy debates is knowledge of what women themselves prefer. This paper is to describe the beliefs and policy preferences of both abused and non-abused women receiving medical care in a large metropolitan health maintenance organization (HMO).

METHODS

Women between the ages of 21-55 enrolled in the participating HMO were recruited by mail for a telephone survey. 1,997 women were screened by telephone to identify 202 cases and 240 controls who then completed a longer interview. Cases were defined as women who reported having been physically abused (hit, slapped, kicked, pushed, or shoved or otherwise physically hurt) or forced into sexual activities by a current or previous intimate partner between 1989 and 1997. Randomly selected controls were women who reported never having experienced such abuse. Women were asked about their preferences for, and perceived consequences for, screening and reporting policies.

RESULTS

Women were on average 41 years old, 61% were married, 42% African-American, 54% European-American, 75% employed full time, 48% had a college or postgraduate education, 44% had no children, and 58% had an annual total household income of more than \$50,000. Preliminary data analysis found that only 49% of cases and 45% of controls should routinely screen for abuse. The vast majority of both groups ($\geq 90\%$) agreed that if there was routine screening, women would be "glad the provider took an interest" and that it "would be easier for abused women to get help" ($\geq 82\%$). 54% of the controls and 43% of cases thought that routine screening would put "abused women at more risk for being hurt". The cases were as likely as the controls to think that "women would be offended" (53% vs 52%). For mandatory reporting, 42% of cases favored requiring HCPs to make a report compared to 58% of the controls; 54% of cases said that reporting should be the woman's decision compared to only 38% of the controls. Beliefs about positive consequences of mandatory reporting included: 67% of cases vs 72% of controls agreed that it would be easier for abused women to get help; 58% vs 49% agreed that abused women would be at greater risk for abuse and 73% vs 68% agreed that abused women would be less likely to tell their HCP about the abuse. Only 24% of women had ever told an HCP about their abuse, and of those women, 9% said the provider was not at all helpful. Multi-variate logistic regression will be used to test whether cases and controls have significantly different beliefs and preferences, adjusting for sociodemographic differences.

CONCLUSIONS

A majority of women in this sample did not favor routine screening or mandatory reporting, despite a number of perceived positive consequences for both policies. Policies and protocols for domestic violence in health care settings need to address women's preferences and concerns, especially with regard to women's safety and autonomy.

Title: The Introduction of Response Biases in Domestic Violence Surveys by Different System Agendas in Multiple Site Studies

Presented: 6th International Family Violence Research Conference, July 25 – 28, 1999

Estimating the prevalence of domestic violence is a challenge because safety issues and the reluctance of some women to discuss the topic results in response biases. Issues specific to this DOD funded research include variations in recruitment protocol required by different institutional review boards (IRB's) introducing potential response biases. This study compared response rates of random samples of military active duty women and civilian HMO women enrollees. Both IRB's required a mailed invitational letter with positive response before respondents could be contacted by phone. The HMO was concerned about losing patients and the military more concerned about the perception of coercion. To assure safety, we mailed both samples a letter with an ambiguous study description and a contact form to be returned in a pre-addressed envelope to indicate interest in participating. The returned contact form from a civilian initiated a phone interview preceded by a verbal consent. A returned contact form from a military woman prompted a second mailing that included a letter with more study details, a written consent form, and a second contact form. A returned signed witnessed consent and this second contact form initiated a phone interview. Preliminary results from the HMO civilian sample show 1476 women (14%) returned a contact form. Phone calls to these women resulted in 1138 (77.1%) interviews, 272 (18.4%) no contacts, and 66 (4.5%) refusals. Of the refusals, 57 (86.4%) preceded the verbal consent for reasons such as deemed too busy. Five of the 57 refusals came from someone else who screened the call. Nine women (13.6%) refused after the verbal consent including reasons for not wanting to disclose information or discuss the topic. The civilian survey has been completed and mailings for military women are underway. Comparative response rates for both groups will be reported at the presentation with a discussion of the influence of competing system agendas on DV research.

Sigma Theta Tau International
11th International Nursing Research Congress - June 26, 1999 - London

Abstract (SYMPOSIUM ONLY)

Abstract Title Physical and Mental Health Consequences of Domestic Violence for Survivors

Please type your ABSTRACT in the space below. Do not include your name as the abstract will be reviewed anonymously.

ABSTRACT

Objective: 1. Assess the prevalence of domestic violence among women enrolled in a HMO. 2. Compare the signs and symptoms of abused and never abused women. 3. Compare the frequency of depression and PTSD among abused and never abused women.

Design: A cross sectional case control study

Population: Women enrolled in a HMO in one major metropolitan city in the US between 1995 and 1998. Sample 1138 women who replied to an invitational letter to participate in study of women's relationships and its impact on their health.

Concept: Domestic Violence, physical health consequences, mental health consequences.

Methods: Women responding to the invitational letter were called at the telephone number provided in her return response by a survey research firm. The interviewers were trained by the investigators on domestic violence and how to protect women's safety. Upon giving consent, 1138 women were interviewed to identify 119 cases and 159 controls. A case was defined as a women experiencing physical or sexual abuse between 1989 and 1997. From these all cases and randomly selected controls were interviewed using a 30 minute protocol which included investigator designed questions, the Abuse Screen, the depression construct of the Brief Symptom Inventory, the crime related PTSD subscale of the SLC-90, the general health subscale of the MOS-36 and the Miller Abuse Physical Symptoms Injury Scale. All women participating in the long interview received \$15. Medical record reviews were also done for presenting problem and diagnosis using a format developed by investigators.

Findings: Prevalence of domestic violence for lifetime was 37% and for 1996 was 3%. Overall number of symptoms and number of symptoms reported to a physician at least one time were higher for cases ($p < .01$) using the t-test for independent samples. The symptoms more often reported by cases using the Chi Square test were: chest pain, back pain, sexually transmitted diseases (including Gonorrhea, Syphilis, Genital Herpes, Chlamydia, HPV and HIV/AIDS) and gynecological symptoms (including pelvic pain, painful intercourse, bleeding not associated with menstrual periods, fibroids and vaginal itch or discharge) (all $p < .001$), UTI ($p < .01$), and headaches ($p < .05$). Both depression and PTSD were found significantly more often for cases ($p < .001$) using the t-test for independent samples.

Conclusions: The long term consequences for women experiencing abuse include more physical symptoms, especially pain, gynecological problems, urinary infections and headaches. These women are also more likely to experience depression and PTSD.

Implications: This has implications for health policy concerning access to health care and the cost to society of domestic violence. The findings have two primary implications for practice: 1) the focus of health assessments done when women report a history of domestic violence, even if it is not now occurring and 2) alerting health providers to probing for domestic violence with women reporting these health problems. Educators need to inform health professionals of the health consequences of domestic violence.

Sigma Theta Tau International
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Abstract (SYMPOSIUM ONLY)

Abstract Title

The Relationship of Alcohol and Other Drugs to Physical Abuse in a HMO sample of women

Please type your **ABSTRACT** in the space below. Do not include your name as the abstract will be reviewed anonymously.

ABSTRACT

Objective: 1) To identify the demographic profiles of abused and never abused women with and without alcohol and/or drug abuse; 2) Describe the alcohol and drug use profile of the partners of the women; 3) Identify women's perceptions of the relevance of their partner's use of alcohol/drugs to problems in their relationship and 4) Examine the relationship of alcohol/drug use of partners and women to being physically abused.

Design: A cross sectional case control study

Population - Middle class working women enrolled in a HMO in one major metropolitan city in the U.S. between 1995 and 1998. A sample of 1476 (13.9%) of the women replied to an invitational letter to participate in the study of women's relationships and their health and 1138 were successfully contracted.

Concept- Substance Abuse, Domestic Violence, Alcohol Abuse

Methods - Women responding to the invitation letter were called at the telephone number provided in her response card. The interviewers of the survey research firm were trained by the investigators on domestic violence and safety issues. Upon giving consent, 1138 women were interviewed regarding demographic variables and an abuse history. 119 cases and 159 controls were identified and consented to a 30 minute interview. The interview included the MOS-36 questions for general health, items to examine the frequency of alcohol and drug use of the partner from the National Health Interview Survey, and the CAGE to examine the women's perceptions of their own alcohol use. In addition one question from the Inventory of Drug Use Consequences (INDUC-2R) was used to assess perceptions of the effects of alcohol/drug use on their relationship. Questions on physical and mental health and mandatory reporting were also included. All women participating in the longer interview received \$15.00.

Findings - Of the women surveyed, 28 (10%) admitted to an alcohol problem as defined by the CAGE while fourteen women (5%) admitted drug use. The presence of an alcohol problem in the women was significantly related to their abuse status ($p < .001$). In addition, reports of the partner's use of alcohol and drugs were both significantly related to the abuse status of the women ($p < .001$). The women in abusive relationships were also more likely to report that their relationship was harmed by their partner's drinking or drug use than those women in non abusive relationships ($p < .001$).

Conclusions - Findings corroborate the findings of other studies showing the relationship between alcohol and drug use of the partner and battering. The findings also support the relationship between a woman's use of alcohol and battering in this middle class sample of women. Previous studies have primarily studied low socioeconomic women.

Implications - The importance of gathering both a domestic violence history and a substance of both the partner and victim is apparent. Future research needs to examine the timing of the use of substances to assess if women are using alcohol or other drugs to self medicate their pain from their relationships.

Ninth International Nursing Conference
December 11, 1998

The Health Status and Medical Utilization of Services for African American and White European
Women DV Survivor and Control Members of the Same HMO Plan

Jacquelyn Campbell, PhD, RN, Andrea Gielen, PhD, Clifford Wynne, MD, Jacqueline Dienemann PhD,
RN, Joan Kub PhD, RN, Alison S. Jones, PhD, Patricia O'Campo, PhD, Janet Schollenberger MHS,
Johns Hopkins University.

Learning Objectives:

1. Describe the prevalence found for Domestic Violence in a sample of middle income privately insured women.
2. Compare the differences in reported symptom patterns by ethnicity and history of partner abuse.
3. Compare the differences in reported medical utilization by ethnicity and history of partner abuse.

This major study of the prevalence and health consequences of partner abuse in women enrolled in one HMO screened 1138 women which included 46.7% African American (AA), 46.7% White European (WE) women with the remainder other minorities. The screening identified a sample of 113 AA and WE cases and 149 controls. A case was defined as any woman who experienced partner abuse since 1989. Controls were defined as women with no lifetime history of partner abuse. The annual prevalence of partner abuse for all 1138 subjects was 3.4%. A statistically significant difference ($p < .05$) in annual prevalence rate was found between AA and WE women. The demographics of the AA and WE women are described.

Symptom patterns for the AA cases, WE cases, AA controls and WE controls were analyzed. Perceived health status was rated as excellent to very good by the majority of women in all four groups. The Miller Abuse Physical Symptoms Injury Scale was used to identify symptoms and injuries in the past year. AA cases reported a mean of 4.2 symptoms and WE cases reported a mean of 3.9 symptoms (NS). AA controls reported a mean of 3.1 and WE controls reported a mean of 1.8 symptoms ($p < .001$). More symptoms were reported to a health provider by AA cases than WE cases (NS) and by AA controls than WE controls ($p < .001$).

Medical usage of services was measured by self report of visits to facilities in and outside the HMO in the past year. AA and WE cases reported the highest number of visits to the HMO (6.1 and 6.8 respectively), however AA cases reported fewer outside HMO visits than WE cases ($p < .05$). HMO visits for AA controls (6.6) exceeded that of WE controls (4.7) (NS). Whether or not they used the ED in the last year was highest for AA cases, followed by AA controls, WE cases and WE controls.

Overall women with a history of partner abuse reported more symptoms and injuries and utilization of health care than those with no history of partner abuse. When controlling for partner abuse, AA with and without a history of partner abuse were less healthy. Usage of medical services was commensurate with reported level of health for all groups.

This study is supported by Dept of Defense grant number DAMD 17-96-1-6310 which is ongoing. These are preliminary results.

SIXTH ANNUAL CONGRESS ON WOMEN'S HEALTH

Please type name and affiliation at the top of the blue box.

Strategies for a Systemwide Response to Domestic Violence by HMOs

Kub, Joan PhD RN, Campbell, Jacquelyn PhD RN, Dienemann, Jacqueline PhD RN, Gielen, Andrea PhD, O'Campo, Patricia PhD, Jones, Alison PhD, Wynne, Clifford MD, Schollenburger, Janet MHS.

In a DOD funded study on identification and health consequences of abuse in civilian and military women, our preliminary findings indicate abuse is a substantial problem for both African American and European White women in mid life enrolled in a HMO who were primarily employed, having a mean household income of \$50,000 or more and had some education beyond high school. These 918 women reported a lifetime abuse prevalence of 37.9% and annual prevalence of 3.6%. Rader et al (1988) found higher medical care utilization with a broader range of diagnoses with abused than not abused women. In the year following identification by the health care provider cases used more mental health services and fewer services for the treatment of other medical conditions. Of the 18.8% of women who reported abuse to their health provider in our study, 65% found the health provider to be helpful. These findings support the value of a coordinated effort for integrated health systems to identify abuse and effectively intervene as part of a coordinated community response to domestic violence. This paper will describe specific strategies for prevention, early detection and intervention by HMO health providers using guidelines based upon the Landenburger model (1989) of stages of abuse. Our findings regarding women's opinions on mandatory screening and health care provider reporting will also be discussed. Contextual factors influencing health provider comfort and competence in screening and intervention will also be discussed.

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REPLY TO
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28 Feb 03

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1. The U.S. Army Medical Research and Materiel Command has reexamined the need for the limitation assigned to the technical reports identified on the enclosed list. Request the limited distribution statement for these documents be changed to "Approved for public release; distribution unlimited." These reports should be released to the National Technical Information Service.

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